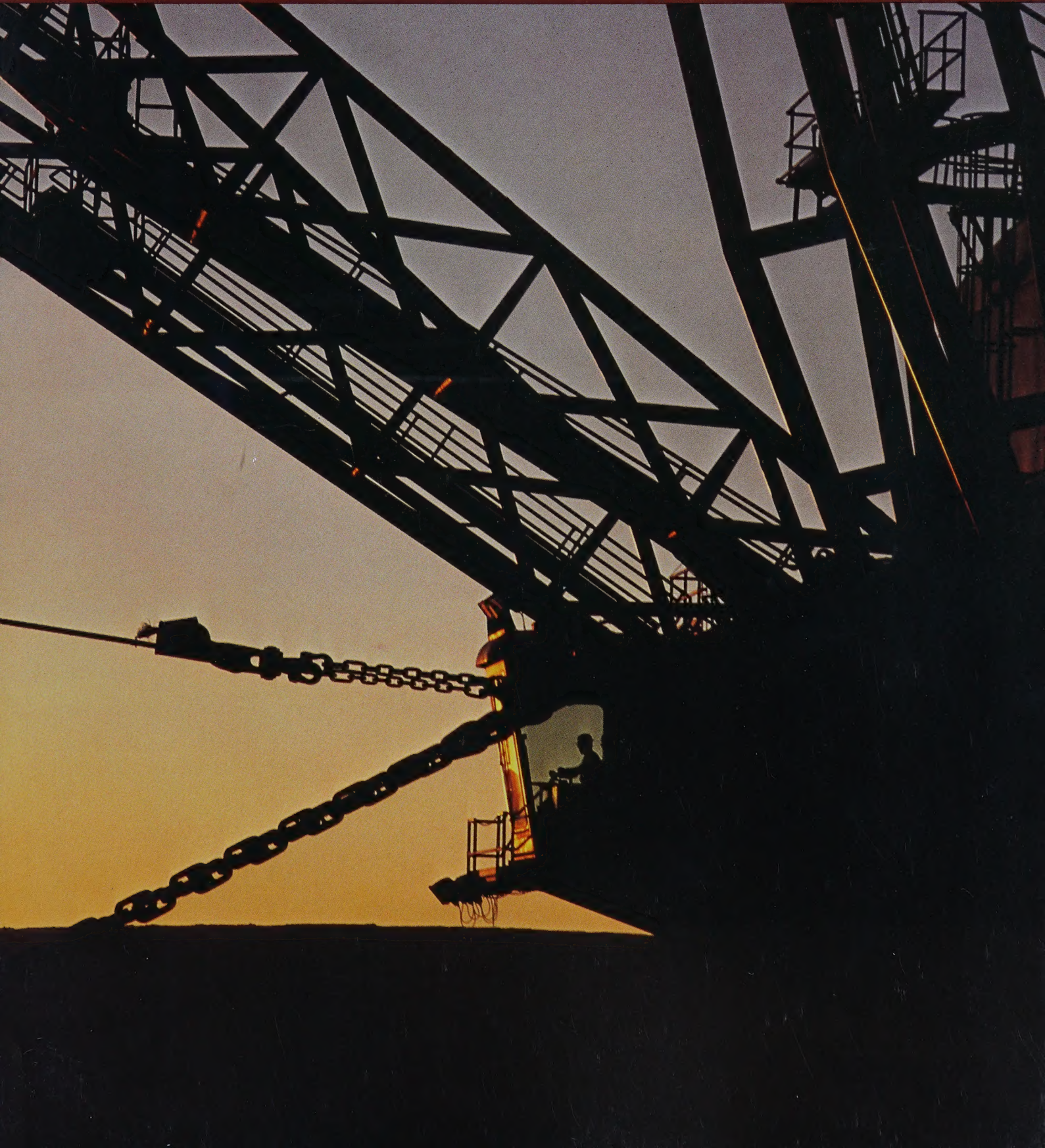




**AR39**





## Contents

Letter to Shareholders . . .	1
Political & Economic Environment . . . . .	3
Exploration & Production . .	4
Refining & Marketing . . . .	10
Trading & Transportation . .	13
Chemicals . . . . .	14
Canada . . . . .	16
Minerals . . . . .	18
Other Activities . . . . .	21
Financial Review . . . . .	23
Financial Statements & Notes . . . . .	27
Report of Independent Accountants . . . . .	42
Geographic Business Segment Data . . . . .	43
Reserve Data . . . . .	45
Five-Year Financial & Statistical Summary . . .	48
Directors & Officers . . . .	56

## Annual Meeting

The Annual Meeting of Shareholders will be held on April 24, 1979, in Heinz Hall, Pittsburgh, Pennsylvania. A formal notice of the meeting, proxy statement, form of proxy and request for admittance card will be sent to shareholders on or about March 22, 1979.

## Cover

Symbolizing the growth of Gulf's minerals activity is this giant dragline at the McKinley coal mine in New Mexico. Expansion of the McKinley mine helped lift Gulf's coal profits to a record level in 1978.

## Form 10-K Information

Copies of the Company's Annual Report on Form 10-K, which will be filed with the Securities and Exchange Commission, will be available without charge upon request to: Vice President and Comptroller, Gulf Oil Corporation, P.O. Box 1166, Pittsburgh, Pennsylvania 15230.

## Financial Highlights

	Millions of Dollars		% Increase
	1978	1977	(Decrease)
Total Revenue . . . . .	\$20,097	\$19,816	1
Operating Income			
United States . . . . .	829	754	10
Worldwide . . . . .	1,300	1,230	6
Net Income			
United States . . . . .	514	468	10
Worldwide . . . . .	791	752	5
Capital and Exploration Expenditures			
United States . . . . .	1,314	2,209	(41)
Worldwide . . . . .	2,129	3,013	(29)
Total Assets . . . . .	15,036	14,235	6
Return on Average Shareholders' Equity . . . . .	10.5%	10.5%	—
Return on Average Employed Capital . . . . .	8.7%	8.9%	(2)

## Per-Share Data

Net Income . . . . .	\$ 4.06	\$ 3.86	5
Cash Dividends . . . . .	1.90	1.85	3
Shareholders' Equity . . . . .	39.78	37.63	6

## Operating Highlights

Net Crude Oil and Natural Gas			
Liquids Produced			
(daily average barrels)			
United States . . . . .	400,000	402,000	—
Worldwide . . . . .	1,591,000	1,687,000	(6)
Net Natural Gas Produced			
(thousand cubic feet per day)			
United States . . . . .	1,882,000	1,865,000	1
Worldwide . . . . .	2,153,000	2,167,000	(1)
Crude Oil Processed			
(daily average barrels)			
United States . . . . .	845,000	840,000	1
Worldwide . . . . .	1,766,000	1,766,000	—
Refined Products Sold			
(daily average barrels)			
United States . . . . .	828,000	822,000	1
Worldwide . . . . .	1,683,000	1,669,000	1
Chemicals Sold			
(millions of pounds)			
United States . . . . .	7,040	6,490	8
Worldwide . . . . .	11,960	10,820	11
Coal Mined			
(thousands of tons) . . . . .	9,000	8,500	6
Uranium Produced			
(thousands of pounds) . . . . .	3,280	2,630	25



# TO GULF'S SHAREHOLDERS

The year 1978 was characterized by a steady improvement in our business environment, and we ended the year with the strongest fourth quarter in our history.

For the full year, earnings increased 5.2 percent to \$791 million, or \$4.06 per share, from \$752 million, or \$3.86 per share, in 1977.

While modest, the improvement was attributable to solid gains in several key areas of operations, particularly United States petroleum and minerals, both of which posted record earnings. In addition, we benefited from our decision earlier in the year to tighten our belt and hold expenditures in line with cash flow.

This effort was a tribute to the more than 58,000 Gulf employees throughout the world whose continued dedication and productivity are the underlying strengths of our Company. The creation a year ago of the four-member Corporate Senior Executive also allowed us to manage our business more effectively by bringing into Gulf's top leadership the additional financial, administrative and technical expertise of our two executive vice presidents, Harold H. Hammer and Edward B. Walker, III.

Still, we recognize that 1978's performance was not sufficient to offset the growth of inflation during the year, nor to lift our return on investment to satisfactory levels. Our return on average shareholders' equity of 10.5 percent was unchanged from 1977, while our return on average employed capital slipped to 8.7 percent from 8.9 percent. It is apparent, therefore, that 1978 can be viewed as a success only if it proves to be the first step in a program of sustained growth.

We are confident that it can be. Over the past five years, we have built a firm foundation for future growth through the investment of \$10 billion in capital and exploration projects. Nearly 70 percent of these funds have been spent within the U.S. But because of the number of years required to bring major energy projects into production, nearly \$2 billion, or 18 percent of our total employed capital at the end of 1978, was invested in projects not yet generating revenue. These include exploratory leases in

the U.S., new oil fields in the North Sea, a refinery project in Wales and the expansion of our U.S. coal and uranium mines—projects which should be significant contributors to earnings in the years to come.

Gulf continued a heavy capital and exploration program during 1978. Although expenditures were reduced by 29 percent to \$2.1 billion from the record \$3 billion spent in 1977, the difference was largely attributable to the acquisition a year ago of Kewanee Industries, Inc. and 12 highly promising leases in the Gulf of Mexico. Even with a reduction in spending for oil and gas operations within the U.S., our energy-related expenditures in 1978 remained among the highest in the industry.

This year, we again expect capital and exploration expenditures to exceed \$2 billion. Increased funding will be required to support an octane-improvement program at our U.S. refineries and to further develop our North Sea fields. While we again have budgeted a reduction in U.S. exploration and production activity in 1979, this will be revised upward if cash flow improves. We still believe that there are attractive drilling opportunities within the U.S., and we will continue to pursue them to the extent that our internal financing capability permits.

We intend to maintain our strong financial position and reserve our substantial borrowing capacity for opportunities that hold the prospect for more immediate returns. The acquisition of producing properties, such as Kewanee, is an option open to us.

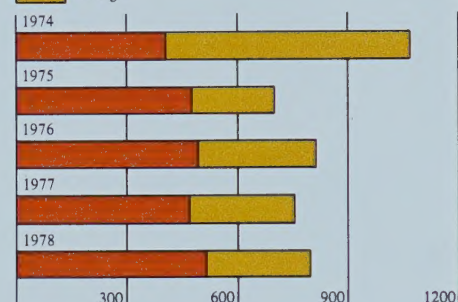
The possibility of raising investment funds by divesting certain low-return assets is also under review. During 1978, Gulf made substantial progress in selling its real estate business. There are other marginal elements of our business which no longer fit our Corporate strategy but which may offer attractive opportunities to others.

We view the future with optimism, but we also take note of a number of uncertainties that cloud our near-term outlook. These include the continued disruption of oil supplies in Iran, compliance with Washington's wage-

## Net Income

Millions of Dollars

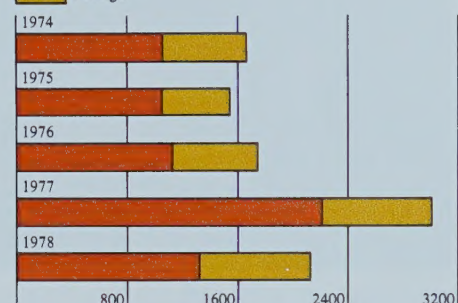
United States  
Foreign



## Capital and Exploration Expenditures

Millions of Dollars

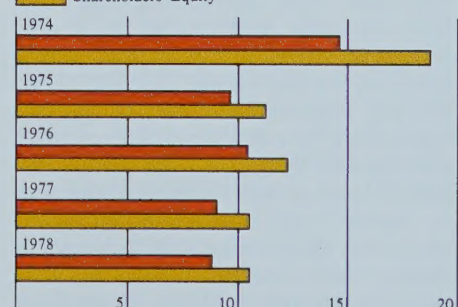
United States  
Foreign



## Return on Investment

Percent Return

Employed Capital  
Shareholders' Equity



price guidelines, the regulatory climate under which we must operate and the litigation which still surrounds our General Atomic Company partnership and its uranium contracts.

While we recognize that the government has become our not-so-silent partner in the energy business, we are troubled by the pervasive growth of regulations affecting every facet of our operations. The rules are complex, confusing and often contradictory. In-





*The Corporate Senior Executive: Harold H. Hammer, James E. Lee, Jerry McAfee and Edward B. Walker, III.*

terpretation is frequently retroactive, and conformance has become a guessing game. Thus, sound and legal business decisions made today may subject us to severe penalties and public criticism in the future. Nevertheless, we will continue to exercise our responsibility to our shareholders and to the country by making the timely decisions demanded for the production of energy. Gulf is currently involved with the Department of Energy in several such matters which are discussed more fully in Note 19 on page 40 of this report.

Finally, in the area of uranium litigation, there have been several encouraging developments within the past year. Most significant, in January 1979, General Atomic achieved the basis for an equitable out-of-court settlement with Ranchers/HNG, one of its uranium suppliers. Also, in the lawsuit with United Nuclear Corporation, General Atomic's principal uranium supplier, a lower court's default judgment was appealed to the New

Mexico Supreme Court—which is scheduled to hear the issue this spring—and separately, federal arbitration procedures were begun in San Diego.

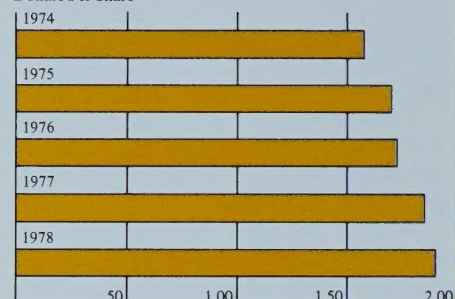
All of the uranium litigation is likely to take years to resolve. In the meantime, Gulf has agreed to use its best efforts to supply, from its own mines, a 3.2-million-pound uranium shortfall facing General Atomic through 1980. The first deliveries under this agreement were made in late 1978. For a full discussion of General Atomic and uranium matters, see Notes 5 and 6 beginning on page 32.

A tragic fire and explosion, in which 50 lives were lost, including those of seven Gulf employees, occurred in January 1979 on board a French tanker at Gulf's Bantry Bay terminal in Ireland. The Board and management have expressed their heartfelt sympathies to the families involved. The cause of the disaster is under investigation.

We would like to take this oppor-

#### Cash Dividends

Dollars Per Share



tunity to express our appreciation to Charles M. Beeghly, retired chairman and chief executive of Jones & Laughlin Steel Corporation, who has reached the mandatory retirement age of 70 and is stepping down from our Board of Directors in April after 10 years of dedicated service.

The progress of the past year was accompanied by the fifth increase in annual dividend payments in as many years. The dividend rate of \$1.90 per share was three percent higher than the \$1.85 per share paid in 1977 and 27 percent higher than the \$1.50 per share paid on similar per-share earnings in 1973.

Aided by the continued support of our employees and the goodwill of our customers, we believe that Gulf will continue to grow and contribute to the nation's energy needs and the well-being of our shareholders.

Respectfully submitted,

*Jerry McAfee  
Chairman of the Board*

*James E. Lee  
President*

February 21, 1979



# PETROLEUM'S POLITICAL & ECONOMIC ENVIRONMENT



The fragile balance of world oil supplies was dramatically underscored in the winter of 1978/79 as the political crisis in Iran shut off the flow of oil from the world's second largest source of exports. Although the growth of energy demand continued to moderate, a surprising buoyancy in gasoline demand taxed the industry's manufacturing capability in both the United States and Europe. And while mounting government regulations continued to fetter the industry's ability to respond to this changing environment, there was growing public concern over the problems inherent in the regulatory process.

Consequently, Gulf views the development of a national policy on the decontrol of U.S. crude oil prices and the removal of price ceilings on gasoline as the most important energy issues of 1979.

The international petroleum market entered 1978 on a note of complacency with a surplus of some 3.5 million barrels per day. But by year-end, the strike in Iran had cut off five million barrels per day, and consumers faced a 14.5-percent oil price rise in 1979 by the Organization of Petroleum Exporting Countries (OPEC).



The U.S. oil picture followed a similar pattern. As the flow of oil from Alaska's North Slope increased early in 1978, imports declined. But in the final quarter as gasoline demand surged, North Slope production reached capacity, and production from the "lower 48" states continued to decline, imports of crude and petroleum products resumed their upward climb. Full-year imports of 8.4 million barrels per day accounted for 43 percent of U.S. oil consumption. A 10-to-12-percent increase in imports is forecast for 1979, which coupled with OPEC's price rise could push up U.S. import costs by more than 20 percent to over \$50 billion.

All of this points to the critical need for the U.S. to place a more realistic value on the energy it consumes. It is Gulf's belief that higher crude

prices will stimulate drilling, reduce the nation's dependence on costly and insecure foreign supplies, and encourage both conservation and the development of alternate energy sources.



A step in that direction was taken in 1978 with the passage of the Natural Gas Policy Act, which set higher ceiling prices for newly found gas and a schedule for the phaseout of price controls on new gas by 1985. Although the act represents one of the most complex laws ever drafted—a complexity compounded by the regulations to implement it—and extends controls into the intrastate market for the first time, it can offer some increase in cash flow necessary to accelerate exploration efforts. The act's merit ultimately will be determined by how wisely it is administered by the regulators and interpreted by the courts.

While Gulf recognizes that inflation is a serious threat to the nation's economy, the Company believes that a phased program of crude oil decontrol can be accomplished under existing statutes on a timely, simple and effective basis. One approach would be an immediate increase in the composite price of crude oil to the statutory ceiling now permitted; the decontrol on June 1, 1979 of all except old oil—that developed prior to 1972; and a schedule which would allow old oil to reach world price levels by September 30, 1981. This would add about five cents per gallon to refined products by 1981, causing an increase of only about 0.3 percent per year in the general inflation rate. Of the income produced, federal and state governments would receive 58 percent in taxes and royalties based on current legislation and tax rates.



Present price controls on crude oil and petroleum products were imposed on a temporary basis in August 1971 and became permanent during the oil embargo of 1973. The Energy Policy and Conservation Act of 1975 established a 40-month schedule to return to free-market prices, but the Depart-

ment of Energy (DOE) has held prices well below those contemplated under the act. Authority for the current mandatory price controls expires on May 31, 1979, however, the President has discretionary authority until September 30, 1981 for modifying controls. With some decision on crude oil pricing necessary this spring, phased decontrol is a sensible solution.

While the past seven years of price controls and regulatory uncertainty have contributed to the decline in crude oil production, they have also inhibited investment in the refinery expansion and improvements needed to increase supplies of unleaded gasoline. Present DOE rules do not permit refiners to recover an adequate return on new investments. At the same time, the Environmental Protection Agency has mandated the use of unleaded fuels in new cars; has banned the use of MMT, a manganese-based, octane-improving additive used as a substitute for lead; and has imposed stiff mileage requirements on auto manufacturers which necessitate the use of higher octane fuel. These requirements can be met only with substantial new refinery investments.



The conflict between these governmental agencies was clearly evident in the closing days of 1978 as the industry's gasoline inventory dropped to the lowest level in five years and demand reached record highs. Some refiners were forced to allocate unleaded grades, and Gulf supplemented its refinery runs with spot-market purchases.

In November, the DOE sought to alter the passthrough of refinery costs in favor of gasoline to spur new investments. Although the proposal was withdrawn in view of consumer opposition, either this so-called "tilt" or legislation to decontrol gasoline prices will be necessary if the industry is to generate the needed capital for new capacity. While these actions admittedly would be temporarily counter to present anti-inflation measures, they are equally necessary if the nation is to avoid another gasoline shortage, which would have far more serious economic consequences.





*Under the floor of the New Era rig, a maze of cables assists drilling in the Baltimore Canyon off the New Jersey coast.*





Gulf Oil Exploration and Production Company, Gulf's largest and most profitable division, has worldwide assets of \$4.5 billion, excluding the value of its extensive oil and gas reserves. Gulf is the seventh largest producer of crude oil and the fifth largest producer of natural gas in the United States, and has substantial foreign liftings. Through its Warren Petroleum division, Gulf is one of the largest marketers of natural gas liquids in the U.S.

During 1978, the Company:

- Increased U.S. natural gas production for the second year in a row to 1.88 billion cubic feet per day from the 1.86 billion in 1977.
- Held the production of crude oil and natural gas liquids in the U.S. essentially flat at 400,000 barrels per day for the third straight year.
- Brought into production seven new fields in the Gulf of Mexico, including one tract acquired in the 1977 lease sale.
- Participated in the evaluation of one of the nation's last frontiers—the Baltimore Canyon off the New Jersey coast.
- Integrated the oil and gas interests of Kewanee Industries, adding 18,000 barrels of crude oil and 53 million cubic feet of gas per day to Gulf's production stream.
- Opened the nation's largest import terminal for natural gas liquids at Warren Petroleum's complex near Houston.
- Received the first liftings of North Sea oil from the Thistle and Dunlin fields.
- Signed a participation agreement with Angola, and secured World Bank consideration for helping Pakistan finance development of its oil reserves.

#### UNITED STATES

During 1978, U.S. crude oil, natural gas and natural gas liquids production generated operating earnings of \$559 million, an increase of nine percent from 1977.

Although average wellhead prices for crude oil increased 10 percent to \$8.89 a barrel, and natural gas realizations rose nine percent to 61 cents per thousand cubic feet, prices remained below free-market levels

and did not keep pace with increased drilling and production costs.

To bring capital and exploration spending more in line with cash flow, expenditures in 1978 were reduced 32 percent to \$838 million but still represented one of the highest spending levels by any U.S. petroleum company. The largest decrease occurred in offshore lease acquisition costs, reflecting the limited number of attractive prospects offered in the government's bidding program. Nine tracts costing \$23 million were acquired in



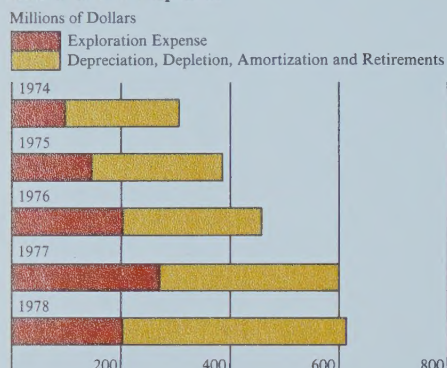
*The New Era drilling a wildcat in the Baltimore Canyon in the Atlantic Ocean.*

the Gulf of Mexico during 1978, compared with \$314 million spent for 12 prime tracts there in 1977.

Wildcat drilling and other exploration expenses were reduced to \$201 million in 1978 from \$272 million a year earlier. However, the benefit to earnings was more than offset by an increase of \$86 million, or 26 percent, in depreciation, depletion and amortization charges, reflecting the Company's increased investment in prior years for production equipment and exploratory leases.



# U. S. Petroleum Exploration And D D & A Expenses



Reserves of petroleum liquids and natural gas continued to decline in 1978, as described on page 45.

With a natural decline rate of about 20 percent a year in production from older fields, the reduction in exploratory expenditures may adversely affect future production, particularly of crude oil. Gulf's efforts in 1979 will be to minimize the extent of any decline by concentrating its drilling efforts on the most prospective sites. Interest in its remaining acreage will be maintained through farm-outs or joint ventures.

Gulf is a leader in secondary recovery efforts with waterflooding or other stimulation accounting for about 31 percent of its crude oil output. In

addition, Gulf had 26 enhanced, or tertiary, recovery projects under way last year.

During 1978, the Company participated in 147 exploratory wells, of which 48 were successful—32 as gas wells and 16 as oil wells. This represented a success ratio of 33 percent, compared with 27 percent in 1977. Additionally, the Company had a 93-percent success ratio in the completion of 1,179 development wells.

Today's emphasis on natural gas is indicative of a nationwide trend as higher allowable gas prices enable the industry to tap deeper, gas-prone formations. Passage of the Natural Gas Policy Act, which lifted the price of newly discovered gas to \$2.08 per thousand cubic feet on December 1, should encourage this trend and have a progressively favorable impact on Gulf's earnings as new discoveries not covered under existing contracts come into production.

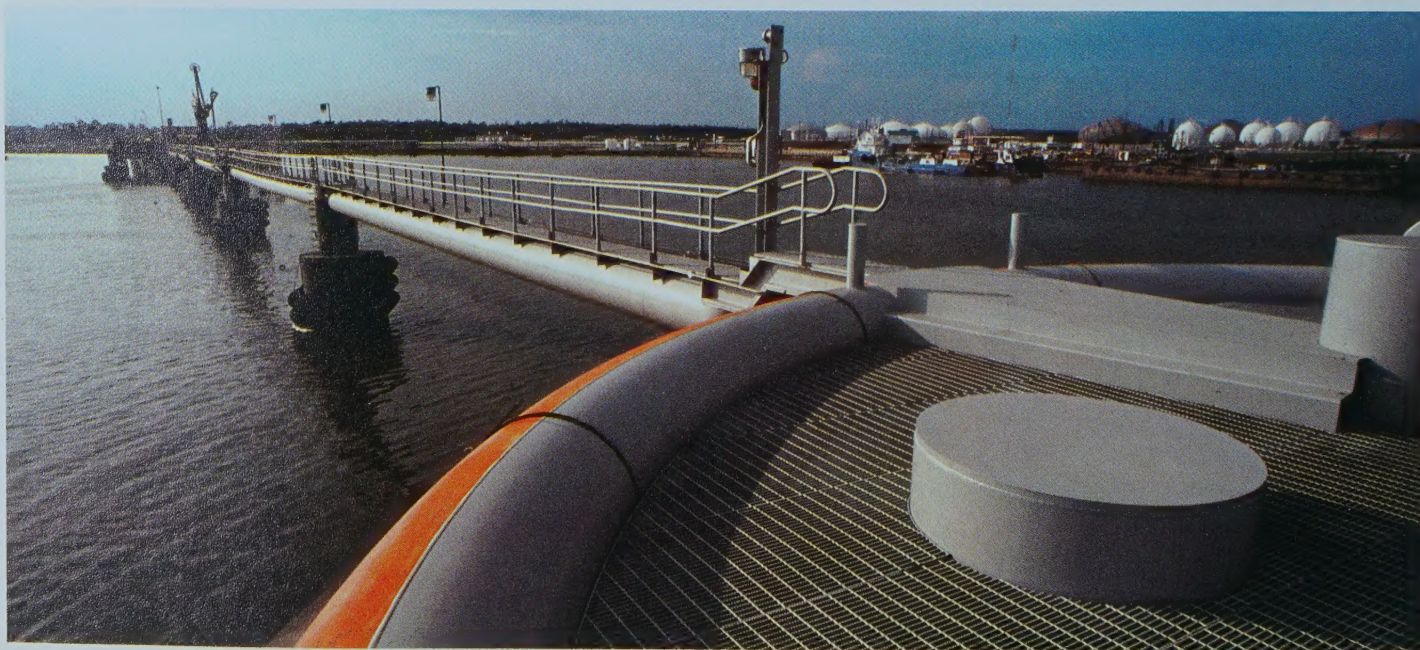
Of the 12 tracts the Company acquired in the Gulf of Mexico in June of 1977, gas has been found on three and a fourth is indicated to be productive. Vermilion Block 24 offshore Louisiana was brought on stream in May. A wildcat well on High Island Block A517 offshore Texas resulted in a sizable gas discovery which may extend to High Island Block 498. In-

stallation of an 18-slot drilling platform was completed early in October and initial output is expected in the third quarter of 1979. Gas production is also expected to begin in the third quarter of 1979 on Vermilion Block 260 where a platform was installed last July. Three other tracts have been partially evaluated by drilling, and initial tests are planned this year for each of the remaining five tracts.

Production was also initiated during the year on South Timbalier Block 31, High Island Block 111, West Cameron Blocks 409, 333 and 198, and South Pass Block 78, all of which were acquired in federal lease sales since 1972.

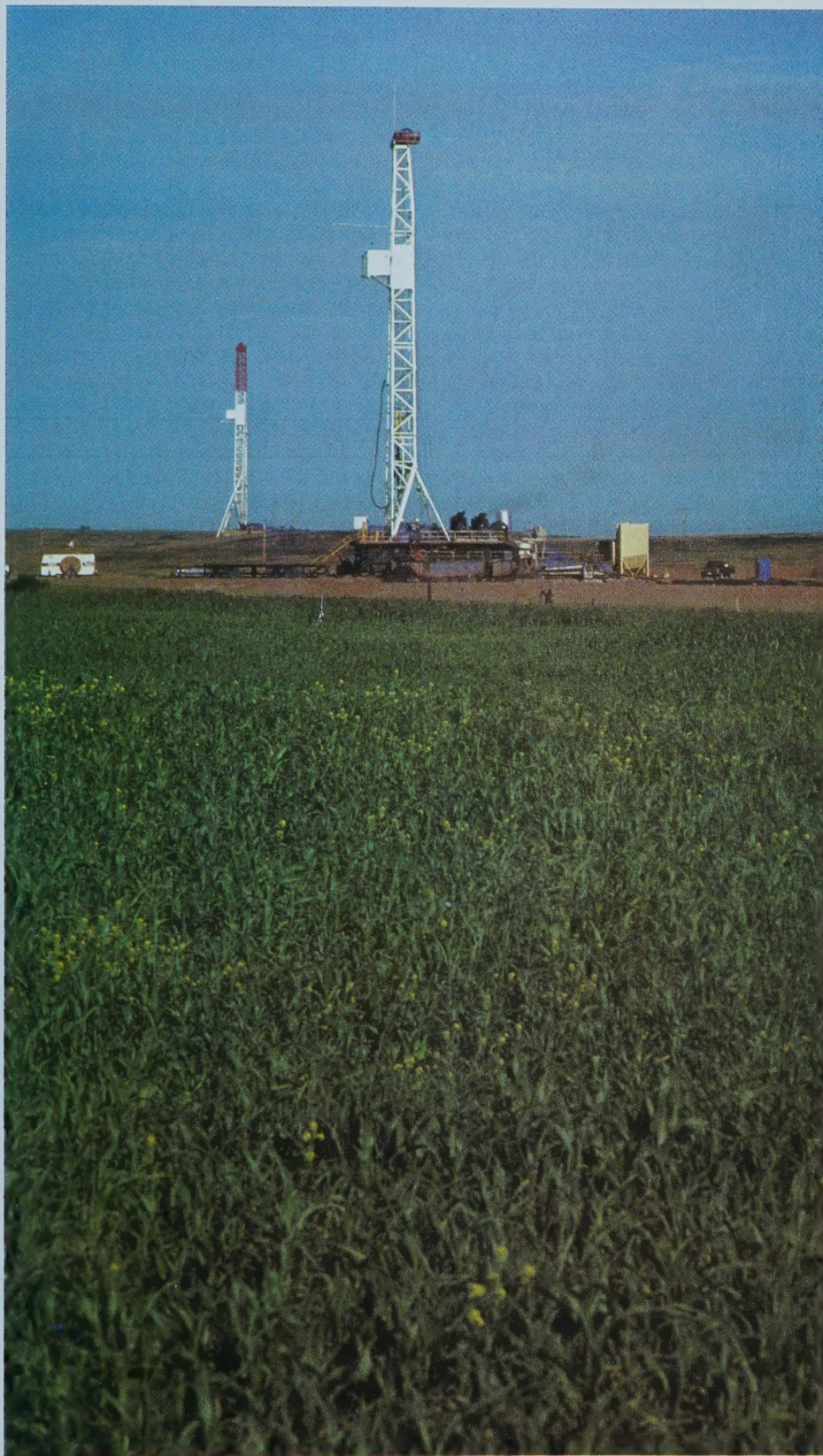
As a result of its extensive efforts in the Gulf of Mexico, Gulf was able to lift deliveries under its low, fixed-price contract with Texas Eastern Transmission Corporation to an annual average of 694 million cubic feet per day during 1978 from 592 million in 1977. If daily deliveries continue at the current rate, the full-contract quantity of 4.4 trillion cubic feet could be delivered by the mid-1980s.

Gulf's first wildcat well in the Baltimore Canyon on Block 857 was drilled to 18,554 feet but was plugged and abandoned in January 1979 after tests failed to indicate significant quantities of hydrocarbons. The drill-



Vessels of up to 750 feet long can be handled at the new Warrengas Import Terminal on the Houston Ship Channel.





*Rigs at work in the Little Knife field of the Williston Basin in North Dakota.*

ing rig has moved to Block 718 where a second wildcat well is being drilled. Gulf participated in two other unsuccessful wells in the Baltimore Canyon during 1978, and spent \$9 million in its Atlantic drilling program.

Onshore, Gulf's net exploratory lease inventory at year-end of approximately 13 million acres represented one of the largest onshore acreage positions of any U.S. company.

The Company continued to develop its most significant onshore discovery in recent years in the Little Knife field near the center of the Williston Basin in North Dakota. Since logging this discovery in 1977, Gulf had completed 69 producing wells by the end of 1978. In November, the Company dedicated a gas processing and desulfurization plant that allowed it to double net crude production from the Little Knife field to 10,000 barrels per day. With 2.7 million net acres, Gulf is the largest leaseholder in the Williston Basin.

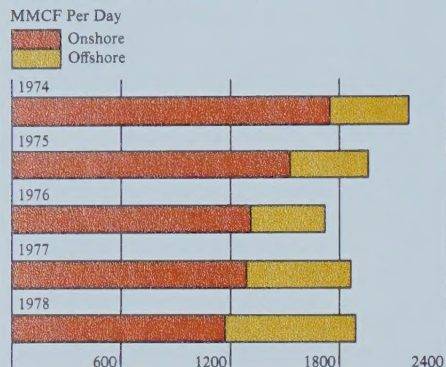
Gulf participated in several significant discoveries in the past year along the trend of the Overthrust Belt in western Wyoming, Utah, Idaho and Montana where the Company has more than 600,000 net acres. Gulf and its partner made the Whitney Canyon discovery in southwestern Wyoming, and the Company has a lease position near another discovery in the Carter Creek area north of Whitney Canyon.

In Texas, the Railroad Commission agreed to allow an increase in production from the Yates field in West Texas in which Gulf has a 10.5-percent interest. The Company's share of the increase amounted to 2,300 barrels per day, all of which qualifies as upper-tier oil.

Of Gulf's total production last year, 54 percent was classified by the government as lower-tier oil, which carried a price of \$5.52 per barrel. The remaining 46 percent was either upper-tier or stripper oil with prices of \$12.25 and \$13.84 per barrel, respectively. Some 76 percent of Gulf's natural gas sales in 1978 were made in the regulated interstate market with only nine percent qualifying for the highest rate of \$1.51 per thousand



### U. S. Natural Gas Production



cubic feet.

Development of Gulf's gas holdings in Webb and Zapata counties in South Texas slowed last year as reduced demand in the intrastate market resulted in as much as 200 million cubic feet per day of production being shut in.

Because the new gas act will allow interstate customers to compete for gas with intrastate buyers, it should help improve the Company's annual production rate. Most of the interstate pipelines have storage facilities that allow gas companies to purchase gas at an even annual rate for later use

in periods of peak demand.

Warren Petroleum Company's expanded import facilities dedicated in October near Houston will permit the Company to substantially increase imports of gas liquids as demand grows. Although prices moderated in response to the depressed chemical market, Gulf's sales of natural gas liquids in 1978 increased two percent to 126,000 barrels per day.

### FOREIGN

Gulf's international operations provided some 1.1 million barrels per day of crude oil, including approximately 800,000 barrels per day from long-term purchase agreements in Kuwait, Iran and Venezuela. During the fourth quarter, political unrest in Iran reduced Gulf's liftings in that country by nearly 50 percent to 138,000 barrels per day, but this was more than offset by increased liftings from Nigeria, Kuwait and Venezuela. However, these countries have not indicated a willingness to further increase production in 1979 to make up for the total shutdown in Iranian output. A country-by-country tabulation of 1978 production is shown on page 51.

Gulf participated in the drilling of 72 wells overseas in 1978, of which 49 were successful. Total exploration and development expenditures abroad increased to \$250 million in 1978, compared with \$179 million in 1977.

In the North Sea, Gulf and its partners are currently participating in four major fields in the United Kingdom sector, which when completed will involve an investment by the Company of over \$700 million. The Thistle and Dunlin fields came on production in 1978, and with the Statfjord field expected to come on stream later this year, Gulf's share of production is expected to average 12,000 barrels per day in 1979. The fourth field, Murchison, is scheduled to come on stream in mid-1980, and by 1983, the Company's North Sea production should total 70,000 barrels per day.

Gulf also has a 20-percent interest in the Hutton field, for which a development schedule is currently being planned. Production there could begin in 1983 with Gulf lifting 20,000 barrels per day at peak output.

A major development during 1978 was the completion of the Brent pipe-



Production platforms in the vast North Sea tap the Thistle field in the United Kingdom sector from which Gulf got its first production in 1978.



line system linking Gulf's North Sea fields to Europe's largest terminal at Sullom Voe in the Shetland Islands.

Gulf and various partners made several applications for blocks offered in the U.K. sector in the sixth round of licensing. Awards will be announced this spring.

In West Africa, Gulf's 45-percent equity volume in Nigeria was increased by 33,000 barrels per day in late 1978. Three new fields were discovered in Nigeria last year and appraisal drilling is under way. Over the next five years, the Company plans to increase the productive capacity of its jointly owned fields by about a third through new exploration and development and by pressure-maintenance projects in existing fields.

The recently signed participation agreement with Angola will allow Gulf, in partnership with Sonangol, the Angolan national oil company, to undertake additional development work and to pursue new exploration ventures within the operating area. Gulf's first well to be drilled since resuming operations in Angola in 1976, was completed last year as an extension to an existing oil field.

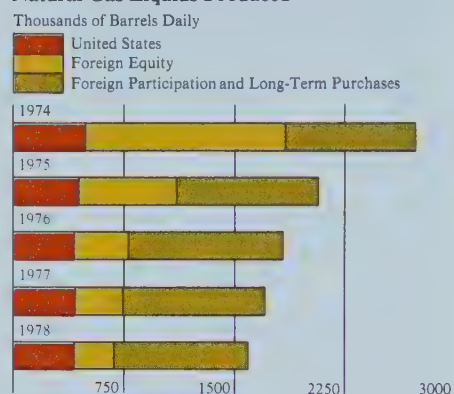
In Zaire, where further exploration is planned for 1979, Gulf and its partners have recently completed a \$25-million water-injection project designed to offset total production declines and to recover an additional 57 million gross barrels of crude oil reserves.

In Indonesia, Gulf has a 17.5-percent interest in South China Sea Block "B", where development drilling is under way and production began in January 1979. The Company is also participating in exploration in three other areas in Indonesia.

Gulf and its partners are evaluating a recent gas discovery in Oman and are in the preliminary stages of evaluating acreage in Egypt, Papua New Guinea and the Exmouth Plateau, offshore western Australia.

In November, Gulf signed an agreement with the government of Pakistan and its national oil and gas company to explore some 9,400 square miles in northern Pakistan. Gulf, in partnership with British Petroleum Company, Ltd., will bear 85 percent of the exploration costs. Following a discovery, development costs will be shared on a 50-50 basis between the

# Net Crude Oil and Natural Gas Liquids Produced

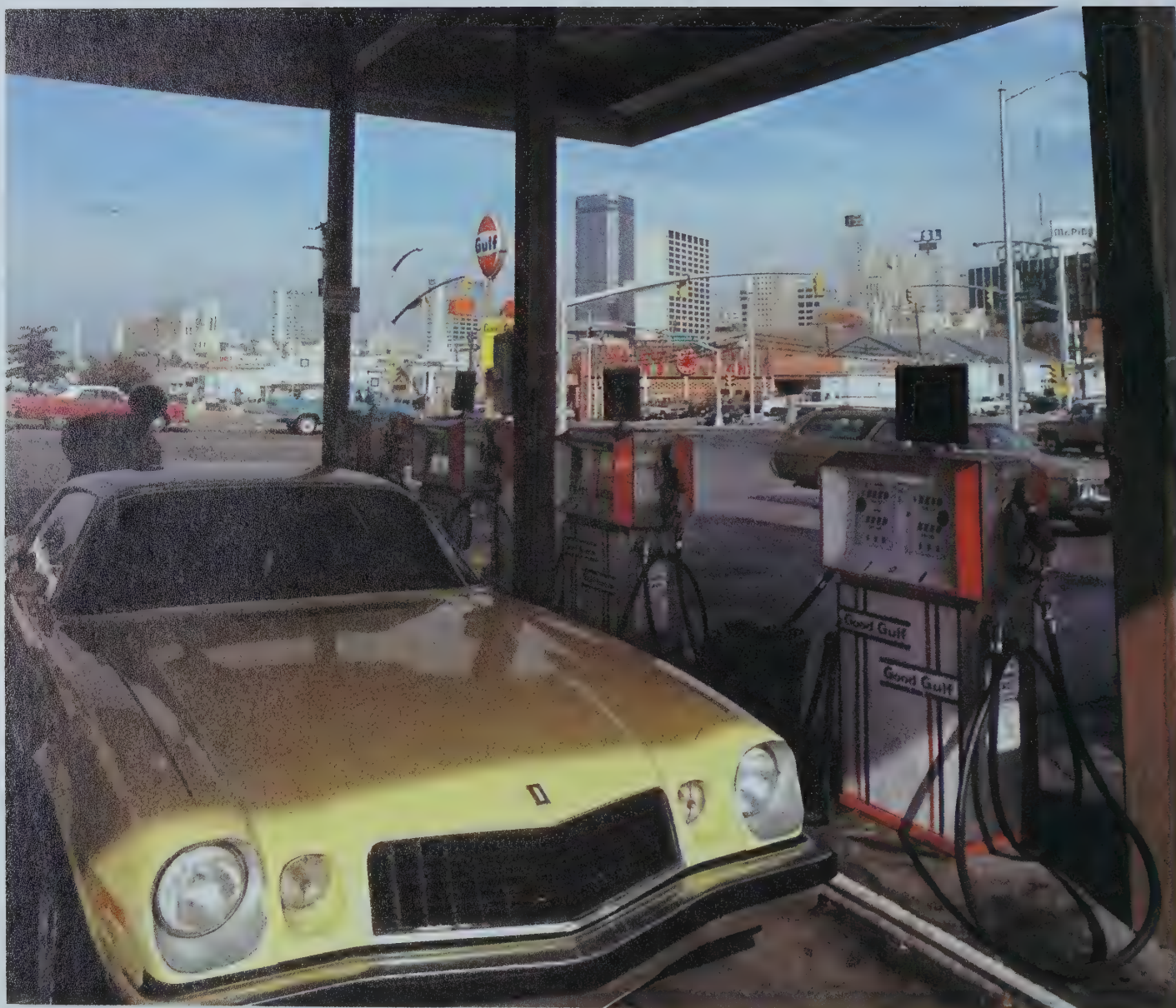


companies and the government. The World Bank will consider helping finance a part of Pakistan's share; the remainder is expected to be arranged by private lenders with World Bank support.

Keydril, Gulf's international offshore drilling contractor, added its seventh and eighth rigs to its operations in mid-1978 and early 1979. Since this company was formed in 1971, it has increased its asset base to more than \$100 million.







*A modern self-serve station markets Gulf's products in Fort Worth.*

Gulf Refining and Marketing Company, with worldwide assets of \$3 billion, is the fifth largest seller of gasoline in the United States, with approximately eight percent of the market in its 29-state marketing area in the east, south and southwest. On a total volume basis, Gulf is a leading seller of refined products in an 11-state area along the Atlantic and Gulf Coasts from Maryland to Texas. Abroad, the Company operates in 16 countries and is most prominent in

Western Europe, where it holds five percent of the motor fuels market in eight countries.

During 1978, Gulf:

- Improved its marketing efficiency as the worldwide demand for gasoline increased.
- Launched a gasoline octane-improvement program in the U.S. with the start of construction on a \$60-million reformer at the Port Arthur, Texas, refinery.
- Added to its marketing network

in Switzerland by acquiring Mobil's 88 retail outlets there.

### UNITED STATES

Aided by an exceptionally strong fourth quarter, operating earnings rose 12.5 percent during 1978 to \$234 million. A three-percent increase in gasoline demand lifted Gulf's total refined product sales to 828,000 barrels per day from 822,000 in 1977. Gulf's seven U.S. refineries operated at 92 percent of capacity during the year,



processing an average of 845,000 barrels of crude oil per day. Although gasoline output, which accounts for 55 percent of refinery runs, was maintained at maximum levels, nearly eight million additional barrels of gasoline were purchased to meet demand.

During 1978, unleaded gasoline accounted for 32 percent of Gulf's total gasoline sales, up from 26 percent in 1977. By 1985, unleaded gasoline is expected to account for 75 percent of the total gasoline pool.

To meet this demand, satisfy the rising octane requirement of new automobiles and comply with the Environmental Protection Agency's lead phase-down requirements, the Company began construction in 1978 on a new reformer unit at Port Arthur. Completion is scheduled for October 1979. In addition, Gulf expects to spend about \$150 million over the next five years to improve the octane level of its unleaded gasoline pool at all of its refineries and capitalize on this growing market.

As a forerunner of this program, the Company began test marketing a new higher octane, unleaded gasoline in Memphis on November 1. The new gasoline, Gulf Super Unleaded, has an octane rating two points higher than Gulfcrest and satisfies the octane appetite of approximately 80 percent of late-model automobiles.

Separately, in December, Gulf announced the start of engineering work on a refinery-modernization program which could include \$200 million in additions and improvements to the Company's two largest refineries at Port Arthur and Philadelphia over the next several years. Under consideration are a new 170,000-barrel-per-day crude distillation unit at Port Arthur to replace some aging units and add 55,000 barrels per day of new refinery capacity as well as improvements to the Philadelphia refinery to lift its capability by about 25,000 barrels per day by 1981. This new capacity—equal to about nine percent of Gulf's current rated output—will be directed toward supplying the growing market for diesel fuel and home heating oil.

In conjunction with the Port Arthur

modernization, Gulf will modify an existing lubricating oil unit to better utilize foreign crudes—and supplement dwindling quantities of domestic lube grades of crude—in the manufacture of quality lube oils.

Early in 1978, Gulf introduced Gulfpride Multi-G Extended Drain motor oil which provides excellent engine protection for up to 15,000 miles between oil changes. However, a synthetic motor oil, Gulfpride Super G, which was test marketed over the past year, was withdrawn after encountering consumer price resistance.

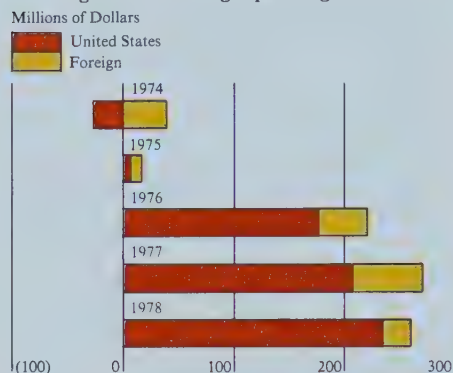
Reliance on foreign crude oil accounted for about 44 percent of the Company's refinery feedstock in both 1978 and 1977. Gulf primarily uses premium-priced, sweet, low-sulfur crudes from countries in West Africa where the Company has production rights and long-term purchase agreements. However, an increasing amount of the Company's crude requirements were purchased outside the Gulf system. Although Gulf does not import Iranian oil for its U.S. refineries, a continuation of the political strife in that country could result in higher prices for all light, low-sulfur imports.

Gulf's average crude oil acquisition cost, including transportation and Department of Energy entitlements, rose nearly five percent in 1978, while sales prices of refined products rose by approximately 4.5 percent to 42 cents per gallon. Gasoline prices continued to be limited in 1978 by federal price controls, although prices for distillate, which includes home heating oil, and heavy fuel oil were not controlled.

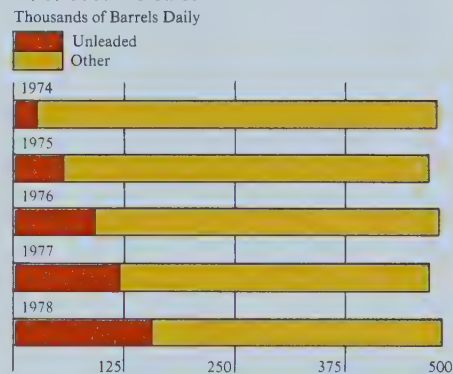
Gulf's marketing strategy continues to emphasize the maintenance and improvement of market share in areas of strength and the selective withdrawal, or conversion to unbranded outlets, in areas of weakness. In 1978, the Company increased its penetration in the south and southeast, where the nation's greatest growth is occurring, and in metropolitan areas, where there is an opportunity for profitable high-volume, self-serve stations. The combination of self-serve pumps with fast-service convenience stores is proving quite successful.

During 1978, Gulf continued its

#### Refining and Marketing Operating Profit



#### U. S. Gasoline Sales



program to eliminate marginally profitable stations, and at year-end had 17,900 retail outlets, of which five percent were Company-operated. The sale of surplus property resulted in cash recoveries by the Company of nearly \$50 million in 1978.

During the year, Gulf also moved to simplify its marketing organization by eliminating its division offices. A brand-reputation advertising program built around the theme "Gulf—The Stop That Keeps America Going" was used on television and radio in 60 key markets, and a new tire marketing program was introduced featuring "Every Day Low Prices."

In California, heavy demand for construction materials boosted earnings at the Company's Industrial Asphalt subsidiary.

In addition, Gulf has interests in a number of pipelines to transport gasoline and other refined products to markets in the midwest, southwest and northeast which contributed to equity earnings.



## FOREIGN

Increased volumes, a favorable product mix weighed toward more profitable gasoline and distillate sales, and benefits from stronger local currencies, enabled Gulf's European operations to virtually break even in 1978. Although these operations earned \$20 million in 1977, this included \$46 million from a reduction in crude- and product-inventory levels.

Equity earnings from Gulf's minority ownership of refining and marketing operations in France and Spain declined in 1978.

Total gasoline sales in Europe, including these equity interests, were surprisingly strong in 1978, increasing six percent, while Gulf's total refined product sales rose by four percent to 338,000 barrels per day. However, overcapacity still plagues the European market and Gulf refineries operated at 72 percent of capacity, compared with 69 percent in 1977. Gasoline output, however, was at near 100 percent of capacity.

Anticipating that future profits in Europe will be in the lighter end of the barrel, Gulf in partnership with Texaco began construction in 1977 on a \$500-million fluid catalytic cracking complex in Pembroke-Milford

Haven, Wales. Upon completion in 1981, the unit will upgrade residual fuel oil to gasoline, which historically has carried a distinct price advantage. Gulf will share in 35 percent of the unit's cost and output.

Additionally, thermal cracking and modernization projects at Gulf's refineries in Holland and Denmark were begun in 1978. When completed later this year, these projects should increase capacity for fuel oil by 7,000 barrels per day in Holland and 4,000 barrels per day in Denmark.

A critical point in terms of volume must be reached in order to minimize unit distribution costs and achieve a desired level of profitability in marketing operations. The acquisition of Mobil's retail outlets in Switzerland in 1978 and Chevron's outlets in 1977 increased Gulf's total stations in that country to 518. This has allowed Gulf to benefit more fully from the output of the Cressier refinery, in which it has a 25-percent interest, to expand gasoline volume by about 2,000 barrels a day, and to gain 12 percent of the market.

Profits from Gulf's Puerto Rican operations, which include a 38,000-barrel-per-day refinery and 200 service stations, improved over 1977. The

refinery's gasoline capacity will be expanded over the next two years by 40 percent.

Gulf sold its small Ecuadorian refinery during 1978 to a group of local businessmen, although lubricant sales there will continue through jobber operations. Marketing of lubricating oils elsewhere in Latin America was expanded in 1978 to Chile and El Salvador. Gulf continues to provide technical services to Venezuela.

Asian operations contributed significantly to equity earnings last year after sustaining a loss in 1977. This improvement largely reflected record earnings by Korea Oil Corporation, in which Gulf has a 50-percent ownership, as refined product sales rose 11 percent to 230,000 barrels per day and price increases were granted by the government. In response to the country's growing economy, Korea Oil completed an expansion of its ethylene capacity to 150,000 metric tons per year from 100,000, and is planning to expand refining capacity to 430,000 barrels per day by 1981 from the existing 265,000.

An expansion program is also under way to double production at the 2,000-barrel-per-day lube oil plant at China Gulf Oil Company in Taiwan.



*A refinery-modernization project under construction at Port Arthur, Texas, will increase unleaded gasoline capacity.*





*The John Henry begins its maiden voyage in ice-clogged Lake Michigan.*

Gulf Trading and Transportation Company, with marine assets exceeding \$500 million, operated 66 owned, leased and long-term chartered vessels in 1978 with a total of 8.4 million deadweight tons. With 17 U.S. flag vessels of 900,000 deadweight

tons, Gulf has the industry's largest U.S. flag fleet.

During 1978, the Company handled over 1.8 million barrels of foreign crude oil a day, enabling it to balance supply and demand requirements within the Gulf system and

buffer both the Company and its third-party customers from supply curtailments and market disruptions.

Diversification has been the hallmark of Gulf's crude oil supply strategy since 1975, and in 1978 the Company handled 46 grades of crude from 20 different countries. Gulf's internal crude availability accounted for 63 percent of the volume; in addition, about 670,000 barrels per day were purchased from outside sources, including 11 national oil companies. These purchased crudes supplied 41 percent of the foreign crude charge at Gulf's worldwide refineries.

During the early months of 1978 when crude markets were oversupplied, Gulf's foreign liftings were maintained at high levels. And during the final months when supplies were tight, the basic requirements of Gulf and its customers were met despite Organization of Petroleum Exporting Countries production limits and the crisis in Iran. Continued Iranian supply disruptions, however, forced the Company to allocate foreign crudes during the first quarter of 1979.

Throughout 1978, a significant percentage of the world fleet was in lay up. Gulf took advantage of this to purchase on attractive terms its seventh vessel in the 110,000-deadweight-ton class. These vessels are used primarily for transporting North Sea and West African crudes to Gulf's United States refineries. Through parallel programs of acquisition and scrapping of smaller, less efficient vessels, Gulf raised the average vessel size of its foreign flag fleet by 10 percent to 152,000 deadweight tons during the past year.

Late in 1978, American Heavy Lift Shipping Company, in which Gulf is a 75-percent partner, took delivery of the *John Henry*, the first heavy-lift vessel to fly the U.S. flag. The ship is capable of carrying single cargo items of up to 1,000 tons. A sister ship, the *Paul Bunyan*, will go into service in mid-1979.

A 400,000-ton calciner unit at Lake Charles, Louisiana, came on stream in February 1979. It will upgrade petroleum coke from Gulf's Port Arthur refinery into calcined coke used primarily by the aluminum industry.





*The growth of crystals is carefully checked at Harshaw Chemical in Cleveland.*

Gulf Oil Chemicals Company and the chemical operations of Gulf Canada Limited have combined worldwide assets of \$1.5 billion, of which nearly 75 percent is devoted to basic and intermediate petrochemicals and plastics. Gulf is one of only two producers in the United States with significant business in all three major polyolefins—high- and low-density polyethylene and polypropylene. Gulf's specialty and industrial chemical business was significantly expanded in late 1977 by the acquisition of Kewanee Industries' two chemical divisions.

During 1978, Gulf's chemical operations:

- Continued to be penalized as overcapacity in the petrochemical industry spilled over into the bulk plastics business. Although operating earnings rose eight percent to \$81 million from \$75 million in 1977, this was still far below potential and less than half the earnings level of 1976.
- Benefited from the steady performance of the Kewanee units—The Harshaw Chemical Company and the Millmaster Onyx Group—which together accounted for 25 percent of total chemical revenue of \$1.7 billion.
- Successfully brought into production two new plastics plants in Texas—a 240-million-pound-per-year, high-density polyethylene facility at Orange, and a 400-million-pound-per-year polypropylene unit at Cedar Bayou.
- Entered the polystyrene business through the acquisition of a 250-million-pound-per-year plant from Union Carbide.

## UNITED STATES

The climate for commodity olefins continues to be highly competitive. Although end-use markets for plastics, paints, synthetic fibers and building materials continue to grow, demand has not been sufficient to absorb the substantial new petrochemical capacity which was brought into production over the past few years. During 1978, Gulf was unable to recover higher feedstock costs as prices for many products, such as ethylene, moved only modestly above their 1977 levels.

Prices and volumes for aromatics,



such as benzene, toluene and xylene, were also lower than anticipated for most of 1978.

However, prices, particularly for aromatics, began to firm in early 1979 partially in response to increased demand for octane-boosting components for gasoline. Over the long term, petrochemical prices are expected to improve with higher plant operating rates and provide satisfactory earnings to established producers.

Another encouraging sign has been the industry's sharp reduction in new capital spending for commodity chemicals since 1977. The high cost of new construction, coupled with the risk of overcapacity, should inhibit another building boom for several years.

In plastics, excess supply resulted in deteriorating prices over most product lines in 1978. At year-end, prices for low-density polyethylene, which is used in packaging, had been rolled back to the lowest point in two years. Despite excellent start-ups at Gulf's two new plastics plants, non-recurring costs also exerted a negative impact on 1978 profits.

However, the near- to medium-term outlook for plastics is encouraging. Demand for Gulf's plastics, which are used in a wide variety of housewares, pipe, packaging, appliance and automotive applications, is expected to grow at a rate one and one-half that of the U.S. Gross National Product in coming years. Polyolefins and polystyrene will continue to make strong inroads against traditional materials such as paper, glass and metal.

The Company has long had a small group of specialty chemical businesses—in blasting materials, crop protection products and adhesives. In 1978, this base was greatly expanded as the result of the acquisition, in late 1977, of Kewanee's Harshaw and Millmaster Onyx operations. The Company's specialties businesses now include catalysts, surfactant materials, germicides, metal-treating compounds, insulation and products for the electronics, agricultural, instrument, mining and plywood industries.

In contrast to the cyclical nature of the commodity chemicals business, the industrial and specialty sector of

the chemical market performed well during 1978. Although the relative contribution of specialties will decline as the petrochemical industry works out of its overcapacity problem, the Company plans to protect and selectively expand its specialty businesses. These are individually small and less capital intensive than petrochemicals. Therefore, by making modest investments in several areas, the Company plans to achieve both growth and adequate diversification without assuming undue risk.

## FOREIGN

Despite good demand, Canadian petrochemical operations were again marginal in 1978 due to soft prices and higher raw material costs.

Effective December 31, 1978, Gulf Canada purchased from Canadian International Paper Company its Commercial Alcohols Limited subsidiary, which is an important ethylene customer of Gulf Canada.

Gulf Canada, Union Carbide and the Quebec government have agreed in principle to form, as equal partners, a new company to operate the Gulf Canada and Union Carbide ethylene plants in the Montreal area as a basis for possible future world-scale expansion.

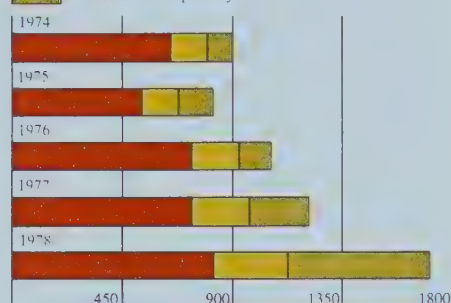
In Europe, market conditions for commodity chemicals have paralleled those in the U.S. Despite a surprisingly strong fourth quarter, demand remains weak. The fact that the industry is significantly overbuilt has also put a squeeze on margins without much encouragement for sustained improvement.

Gulf's major participation in Asia is a 60-percent interest in China Gulf Plastics in Taiwan. This has been a profitable venture and the outlook is for substantial growth as further business expansion in Taiwan is planned. Construction of a low-density polyethylene plant by Asia Polymer Corporation in Taiwan, in which Gulf owns a 35-percent interest, is ahead of schedule with start-up planned for the second quarter of 1979. Profits for the Chinhae Chemical Company, the Korean agricultural chemical firm in which Gulf has a 25-percent interest, were above expectations.

## Chemical Revenues

Millions of Dollars

Petrochemicals  
Plastics  
Industrial and Specialty



Night operations at Gulf's new polypropylene plant at Cedar Bayou, Texas.





*A Gulf Canada rig works in the snow-covered foothills of Alberta where significant reserves were added last year.*

Gulf Canada Limited, Gulf's 68-percent-owned subsidiary, is Canada's second largest oil company with assets of \$2.3 billion and sales of \$2.5 billion. It is also that country's second largest refiner with 17.5 percent of total capacity and sells a full range of petroleum products in all Canadian provinces and northern territories.

During 1978, Gulf Canada:

- Earned \$183 million (Canadian dollars), down slightly from \$185 million in 1977, with Gulf's share equal to \$90 million, compared with \$91

million a year ago.

- Received its first deliveries from the Syncrude oil project, in which it has a 16.75-percent interest and a total investment of \$344 million.

- Completed construction of a \$203-million lubricating plant at its Clarkson, Ontario, refinery.

- Participated in growing exploration efforts in western Canada and shared in the drilling of two promising Beaufort Sea wells which are still to be tested.

The Canadian government's policy

of increasing crude oil and natural gas prices in conjunction with world price changes resulted in a 23-percent increase in crude prices and a 10-percent rise in natural gas realizations to \$10.78 per barrel and \$1.37 per thousand cubic feet, respectively. However, Gulf could not fully benefit from these prices as a surplus of production capacity resulted in 20 to 25 percent of Gulf Canada's oil and gas capacity being shut in.

While Canadian energy growth has been lower than anticipated, the sur-



plus is primarily related to government restrictions on exports to the United States and to significant discoveries and reserve additions in western Canada which have been stimulated by higher prices and profit margins. Gulf Canada's net crude oil production declined two percent to 65,100 barrels per day, and net natural gas production fell by 10 percent to 271 million cubic feet per day.

In 1979, conventional oil and gas production is expected to hold at the 1978 levels, and an increase of 10,000 barrels a day in oil production is anticipated from the Syncrude project.

Capital and exploration expenditures decreased slightly to \$436 million in 1978 from \$470 million in 1977. Approximately 50 percent, or \$220 million, was spent for exploration projects in 1978.

On January 1, 1979, Gulf Canada Resources, Inc. was formed as a wholly owned subsidiary to improve the exploration and development of Gulf's extensive natural resource holdings. The new subsidiary will be headquartered in a new, 20-floor office tower being built for Gulf Canada in downtown Calgary, Alberta. Two blocks long, the \$63-million Gulf Canada Square is the largest office and commercial development ever built as a single project in western Canada.

During 1978, Gulf Canada participated in 59 exploratory wells which resulted in 18 oil and gas discoveries. Significant reserves were added in the Robb-Hanlan and Stolberg areas in the foothills of Alberta.

Gulf Canada has an excellent acreage position in the British Columbia portion of the deep-basin gas play which includes the Elmworth field in Alberta. A significant shallow-gas discovery was made at Magrath in southern Alberta, and oil exploration was carried out in the Suffield and Lloydminster areas close to the Alberta-Saskatchewan border.

There was no activity on the Mackenzie Delta acreage during 1978, but approximately 30 percent of the Company's exploration outlay was spent on the other frontier areas where Gulf Canada participated in nine wells.

In the Beaufort Sea, the Ukalerk and Kopanoar wells were drilled to total depth but bad weather prevented testing until 1979. A third Beaufort location, Tarsiut, will also be completed in the summer. An ice island is under construction for drilling of the Issungnak well in the winter of 1979/80.

In the Arctic Islands, Gulf Canada participated in two wells, one of which was a gas success. At year-end, two additional wildcats were being drilled from ice islands. Also, Gulf Canada participated in two wells on the Labrador Shelf, one of which was abandoned and the other suspended awaiting completion in 1979.

In August, production began from the Syncrude project in the Athabasca tar sands of Alberta and by year-end, Gulf had received 600,000 barrels of this oil which has been used in three of its refineries with good results. Rated capacity of the Syncrude plant is 109,000 barrels a day but this will increase to 129,000 barrels per day within four years. Under agreement with the Canadian government, all Syncrude production is sold at world prices.

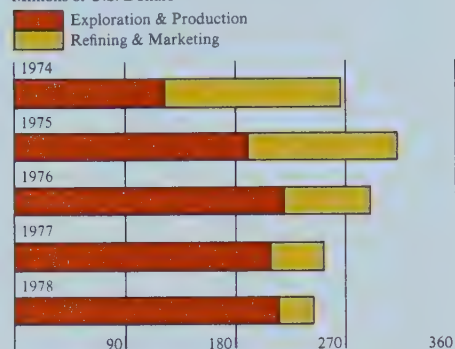
In other heavy-oil activity, 30 exploratory wells are planned on the 120,000-acre Surmont property in northeastern Alberta where Gulf has a 100-percent working interest.

In an effort to broaden its resource base, Gulf Canada entered into a joint venture with Denison Mines to evaluate Denison's 116,000-acre Belcourt coal property in British Columbia. Drilling of 16 core holes confirmed the presence of enough high-quality metallurgical coal to support production of four million metric tons a year. Late in 1978, Gulf Canada also acquired 83,000 acres of coal property in the Chip Lake area west of Edmonton, Alberta.

Gulf Canada has six refineries and two asphalt plants located across the country with a total capacity of 385,000 barrels per day. Because of the surplus of refining capacity in eastern Canada, Gulf's refineries operated at 78 percent of capacity during 1978 as compared with 90 percent in 1977. The Point Tupper refinery in Nova Scotia was closed for

**Canadian Petroleum Operating Profit**

Millions of U.S. Dollars



90 days late in 1978. Overall, crude oil processed by Gulf Canada declined 11 percent to 301,000 barrels per day.

Since much of Gulf Canada's foreign crude supply has historically come from Iran, arrangements were being made at year-end to obtain supplies from other sources as the continuing unrest in Iran has made its future crude supplies uncertain.

The new two-million-barrel-a-year lubricating oil plant at the Clarkson refinery began production in early 1979. With four times the capacity of Gulf's older facilities, it is capable of producing a full line of high-quality lubricating oils and greases to meet Canada's shortfall of lubricating oil production.

Construction will begin in 1979 on North America's first sulfur-prilling facility at the Strachan gas plant near Rocky Mountain House, Alberta. Upon completion late this year, the plant will allow Gulf Canada to produce an environmentally acceptable solid form of sulfur for sales overseas.

Because of the reduced use of leaded gasolines in automobile engines, Gulf Canada has developed the technology and has filed patent applications for high-octane oxygenated gasoline components which could provide the industry with an economical way to meet octane requirements without lead additives.

Gulf Canada continued to upgrade its retail outlets during 1978, and at year-end, had a network of some 3,200 retail outlets of which almost 10 percent were high-volume, self-serve units.





*Draglines remove tons of overburden to open a coal seam at Gulf's largest mine, the McKinley mine in New Mexico.*





Gulf Mineral Resources Company has assets of \$550 million. With total recoverable coal reserves of one billion tons, it is one of the nation's larger coal producers. Gulf is also a major uranium producer in Canada, is developing the largest uranium deposit in the United States with recoverable reserves in excess of 100 million pounds, and is a leader in the development of synthetic fuels.

During 1978, Gulf Mineral Resources:

- Recorded operating earnings of \$45 million, a fourfold increase over the \$10 million earned in 1977.
- Achieved record coal profits and the highest coal production in 10 years.
- Completed the production and service shafts at the Mt. Taylor uranium mine to a depth of 3,200 feet.
- Began development of its oil shale tract.
- Signed an agreement with the Department of Energy (DOE) to design a Solvent Refined Coal (SRC) demonstration plant.
- In Canada, significantly increased known uranium reserves at the previously discovered Collins Bay deposit.

Capital and exploratory expenditures rose 60 percent in 1978 to \$192 million, including \$40 million for the acquisition of coal properties by Gulf Canada. The Company's coal and uranium reserves are discussed on pages 46 and 47.

#### **UNITED STATES**

Despite the longest strike in recent coal-mining history and a generally soft coal market, 1978 was the most profitable year in the 94-year history of The Pittsburg & Midway Coal Mining Co., Gulf's coal subsidiary. Operating earnings reached \$32 million, compared with \$16 million in 1977, as coal production rose six percent to nine million tons.

New labor contracts negotiated with employees at Gulf's two western mines a week before a national strike began in December 1977, enabled both the McKinley mine in New Mexico and the Edna mine in Colorado to operate at capacity throughout the three-and-one-half-month strike.

Profits were also protected from the market softness which developed in the second half of the year since most of the Company's production is sold under long-term contracts to utility customers at prices and quantities previously established.

Nearly 90 percent of Gulf's production last year came from western and midwestern surface mines, including 1.1 million tons from a 24-percent equity interest in the Westmoreland Resources mine in Montana. Gulf's remaining coal was produced from underground mines in western Kentucky. Substantial coal reserves have been acquired in recent years in Illinois, Kentucky, Ohio and Pennsylvania to supplement older holdings in Colorado, Kansas, Montana, North Dakota and Wyoming.

This geographic diversity gives Gulf necessary flexibility in view of changing government policy on coal leasing, reclamation and environmental protection. A major issue which could influence new mine locations is the Environmental Protection Agency's attempt to require flue-gas scrubbers on all coal-fired utility boilers regardless of the sulfur content of the coal burned. Such a requirement could shift demand from low-sulfur, western coal back to higher sulfur, eastern and midwestern coals.

During 1978, however, Gulf's development efforts continued to be focused on its western properties. Expansion at the McKinley mine continued with a third 55-cubic-yard dragline put into service and a fourth unit readied for operation in early 1979. Production at the mine doubled during 1978 to three million tons, and output is expected to reach five million tons during 1980.

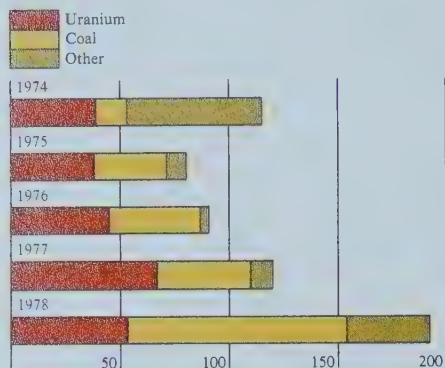
At the Edna mine, studies are under way on the development of an underground mine with potential production of a half million tons a year to supplement the existing surface mine. In addition, this new mine could provide the nucleus for a major underground mining complex in the area if federal coal lease sales, which have been suspended since 1971, are resumed.

Last year was the first year of operation under the 1977 Surface Mining Control and Reclamation Act, and



### Minerals Capital and Exploration Expenditures

Millions of Dollars



costs directly related to these regulations totaled nearly \$16 million. Approximately 40 percent of this was for the purchase of new reclamation equipment. In 1977, Gulf's reclamation costs were \$9.5 million.

Excellent progress was made during 1978 in developing the Mt. Taylor uranium mine in northwestern New Mexico. Overcoming challenging engineering problems of extreme heat and underground water flows, both the service and the production shafts were completed to the 3,200-foot level and work began on mine development. Test mining will begin soon and is expected to be completed later this year.

Commercial production is expected in 1981, with annual output reaching four to five million pounds per year by 1983. Applications for a license to construct a mill to separate the  $U_3O_8$  from the ore have been filed with the state. Construction is scheduled to begin in the first quarter of 1980.

Although none of Mt. Taylor's reserves has been committed, the Company expects to begin marketing later this year. Despite a leveling of uranium prices during 1978, Gulf believes that a strong uranium market will continue throughout the life of the Mt. Taylor project.

The smaller Mariano Lake uranium mine, which came on production in New Mexico in late 1977, encountered a difficult start-up year.

Gulf jointly owns a 5,100-acre oil shale tract in northwestern Colorado with Standard Oil Company (Indiana). In February 1978, shaft sinking on this tract was begun as part of the

development of an underground process for extracting oil from shale. In the process, the rock will be broken up and heated by partial burning in underground chambers called retorts and the shale oil pumped to the surface. The first retort should be ready in early 1980.

Progress was also made during 1978 in proving the feasibility of the SRC process that converts coal to low-sulfur fuel oil. Gulf has operated an SRC pilot plant at Ft. Lewis, Washington, for the DOE since 1974, and during the past two years has produced some 10,000 barrels of synthetic fuel oil. A successful test burn of 4,500 barrels was conducted by Consolidated Edison Co. in New York City last September proving that the fuel met or surpassed federal emissions standards with performance efficiencies similar to petroleum fuel oil.

In July, Gulf signed an agreement with the DOE that could lead to the design, construction and operation of an SRC demonstration plant near Morgantown, West Virginia. Gulf will do the initial engineering; construction and operation of the plant will follow if warranted by the economic and technical feasibility as the project progresses. The West German government is negotiating an agreement with the DOE to pay 25 percent of the cost

of such a plant, and the Japanese government has also expressed an interest.

Exploration efforts in the non-energy minerals area continued during 1978 with encouraging results.

### FOREIGN

In Canada, production from the Rabbit Lake uranium mine and mill in northern Saskatchewan reached 5.5 million pounds, of which Gulf's share was 2.8 million pounds, compared with 2.6 million in 1977. During 1978, deliveries were made to Japanese, Swiss and Spanish utilities and to Gulf's West German partner in the mine, Uranerz Canada Limited.

In 1978, Gulf began the sale of uranium to General Atomic Company (as discussed in detail on page 33).

Extensive drilling was carried out during 1978 on the Collins Bay deposit, which is near Rabbit Lake. The initial evaluation indicates a high-grade ore body of significant size. Engineering is under way with a target date for production in the early 1980s. The deposit occurs on mineral leases held 90 percent by Gulf and 10 percent by Gulf Canada and should permit operations to continue at the present site after the Rabbit Lake mine is exhausted.



The Rabbit Lake mine and mill in Canada produced 5.5 million pounds of uranium in 1978.



## OTHER ACTIVITIES



*Scribing magnetic data on a topographical oil map at Gulf's research laboratory.*

### SCIENCE & TECHNOLOGY

Gulf Science and Technology Company is Gulf's principal research and development arm with laboratories in Pittsburgh, Houston, and Rotterdam. In 1978, research and development expenditures totaled \$96 million, compared with \$82 million in 1977.

Gulf's principal research activities are concentrated in four areas: exploration and production, refining and petroleum products, chemicals, and synthetic fuels and minerals.

Major emphasis in 1978 was placed on new exploration techniques, including further development of Gulf's leading positions in "bright-spot" direct detection and geochemical techniques to more accurately locate subsurface accumulations of oil and gas. In production, development continued on enhanced-recovery methods to increase production from existing fields. Computer simulation models were used to permit engineers to more accurately predict a reservoir's performance during enhanced recovery.

Gulf's primary efforts in refining were in process improvements, energy conservation, new catalyst development, gasoline octane improvement and advances in lubricating products.

In chemicals, research was directed at improving present petrochemical and plastic production processes and in support of the Harshaw Chemical and Millmaster Onyx subsidiaries acquired in 1977.

Gulf continued its research and development programs in oil shale, coal liquefaction and gasification with many of these efforts partially funded by the U.S. government.

In recognition of the long lead times needed to develop new technologies, a specific research and development program to prepare Gulf for the 1985-2000 period was launched in 1978. Some 10 percent of Gulf's research and development efforts are focused on this long-term effort.

Gulf began development in 1978 on a toxicology laboratory in conjunction with Carnegie-Mellon Institute of Research in Pittsburgh. The laboratory is expected to provide toxicological testing on Gulf's products and process streams as required by government regulations on toxic substances and safety in the workplace.

### GENERAL ATOMIC

General Atomic Company, Gulf's equal partnership with a Royal Dutch/Shell Group company, derived about 75 percent of its 1978 external funding of \$84 million from government-supported research and development programs in the High Temperature Gas-cooled Reactor (HTGR), Gas Cooled Fast Breeder Reactor, fusion, solar and other advanced energy concepts. The remaining revenue was derived from various commercial programs.

HTGR development, including "non-proliferation" fuel studies supported by the Department of Energy (DOE), remained a major program at General Atomic. Formation of Gas Cooled Reactor Associates in February 1978 by more than a dozen major electric utilities, added industry sponsorship and guidance for HTGR work. General Atomic's fusion power research was highlighted by the start-up of the \$31-million, DOE-sponsored Doublet III machine, which is expected to demonstrate for the first time actual fusion reactor conditions.

Negotiations currently are under

way with the Public Service Company of Colorado under which General Atomic expects to make substantial payments and provide specified services for the Fort St. Vrain nuclear generating plant but will be relieved from future responsibility for its performance. The 330,000-kilowatt HTGR plant had generated more than one billion kilowatt-hours of electricity by mid-January 1979, even though operating problems continued to limit its performance to no more than 70 percent of rated capacity.

Because of an additional loss provision of \$25 million for the Fort St. Vrain plant, Gulf's share of General Atomic's losses amounted to \$43 million in 1978, compared with \$18 million in 1977. In early 1979, the basis for a settlement was reached with Ranchers/HNG, one of General Atomic's uranium suppliers. A full discussion of these financial and legal issues is covered in Note 5 on page 32.

### REAL ESTATE

Gulf Oil Real Estate Development Company achieved significant success in 1978 in carrying out the divestment of its major real estate holdings. At the new town of Reston, Virginia, 3,500 acres of undeveloped land were sold in July to a subsidiary of Mobil Corporation. As a result, Gulf is no longer in the land development business in Reston, although considerable industrial, commercial and residential properties remain to be sold.

Also divested during 1978 were an office complex outside Kansas City; a large warehouse project in Puerto Rico; 156 condominiums, 49 acres of land and two office buildings at Florida Center in Orlando; the former headquarters building of Kewanee Industries in Bryn Mawr, Pennsylvania; the investment in Kuwait Gulf Real Estate Company; and several recreational vehicle parks. The Company also assigned its interest in the new town development at La Prairie near Montreal to Gulf Canada Limited.

At the end of 1978, Gulf's only active efforts in the real estate development business were Ocean Village at Fort Pierce, Florida, a successful condominium project, and a recreational vehicle park at Mesa, Arizona.



In the future, Gulf's real estate activities will be the management of projects closely related to the Company's business objectives. At Grants, New Mexico, a real estate development project is under way to provide housing for Gulf's employees at the Mt. Taylor uranium mine. Model homes, to be built and sold by local contractors on land developed by Gulf, will be available this spring. A similar project is under way at Lagos, Nigeria, where 117 residential units are being built under Gulf's supervision for its Nigerian employees.

As a result of the achievements in 1978, external obligations of Gulf's real estate company were significantly reduced, and the Company believes that the completion of its real estate divestment program will not have any significant impact on earnings.

#### PEOPLE & STAFF SERVICES

In order to improve efficiency, maintain productivity and retain employee loyalty, Gulf placed added emphasis on its human resources activities in 1978. The Company was a pacesetter in labor negotiations with both the United Mine Workers and the Oil, Chemical and Atomic Workers (OCAW). After setting a pattern that avoided a strike of western coal miners, Gulf put forward the first offer to the striking eastern coal miners early in 1978 in what syndicated columnist Joseph Kraft described as "a rare act of industrial statesmanship." Although that offer was later rejected by the rank and file, it was regarded as a major force in ending the three-and-one-half-month coal strike.

In January 1979, Gulf's offer in the OCAW negotiations set the pattern for the petroleum industry by reaching a balance between union demands and the government's new wage guidelines. *Business Week* editorialized that the agreement got "President Carter's wage guideline program off to a good start."

As part of a belt-tightening program, some 1,500 employee positions were eliminated in 1978. Most of the reductions were at the staff level at headquarters, in refining and marketing and trading and transportation. To lessen the impact on affected

employees, the Company granted early retirement or vested pension benefits to those eligible, severance pay and outplacement counseling. However, because manpower additions were necessary to staff mine expansions, new chemical plants and other programs, the net reduction in Gulf's worldwide workforce was 1,100. At year-end, the Company employed 58,300.

Gulf continued its commitment to equal employment opportunity during 1978. Minority employment increased slightly to 15.7 percent of the total U.S. workforce, while female employment recorded a small decrease to 18.4 percent of the total.



*Treasury department employees process shareholder records in Pittsburgh.*

Minorities accounted for 27.6 percent of new employees and females for 25.5 percent. In the area of upward mobility, during 1978, 19.6 percent of all promotions went to minority employees and 24 percent to females. As part of its commitment in this area, Gulf uses a variety of evaluation techniques and training programs to ensure that all of its employees have the opportunity to develop to their maximum potential.

During 1978, Gulf continued its strong support of civic, educational and charitable institutions in the communities in which it operates. In May,

#### Employees at Year-End

	1978	1977
Petroleum		
Exploration & Production ..	8,400	8,100
Trading & Transportation	3,500	3,600
Refining & Marketing ...	25,800	27,200
Chemicals .....	10,900	10,500
Minerals .....	2,700	2,300
Technical & Support .....	7,000	7,700
	<u>58,300</u>	<u>59,400</u>
United States ....	34,700	35,500
Canada .....	11,100	11,100
Europe .....	5,800	5,900
Other Foreign ....	6,700	6,900
	<u>58,300</u>	<u>59,400</u>

the Company donated 157 acres, valued at \$1.5 million, in Marlboro, Massachusetts, to the South Middlesex Association for Retarded Citizens. The Association will use 10 acres for a vocational training center for the handicapped, while the rest will be developed into an industrial park. Thus, Gulf's gift will not only provide a valuable learning facility but also will increase jobs in the area.

Gulf and the Gulf Oil Foundation also contributed \$5 million for charitable and educational purposes during 1978. Energy and environmental problems received special support as did programs for minorities. Approximately \$3 million went to colleges and universities in support of various programs and in scholarships to students.

The remaining \$2 million went to a variety of charitable and other programs. The United Fund in plant communities received almost one-third of this while the rest went to hospitals, cultural and scientific programs and other community services.

Gulf Oil Foundation and the National Chamber of Commerce received the 1977 National Freedoms Foundation Award for the Chamber's "Economics for Young Americans" educational program that Gulf sponsored in both 1977 and 1978. The program is designed to promote understanding of the private enterprise system among high-school students.



# FINANCIAL REVIEW

## Disclosure Policy

Gulf's financial reporting practices are based on two fundamental principles—a philosophy of conservative accounting in accordance with generally accepted accounting principles coupled with a commitment to disclose fully all material developments. Over the past several years, this policy has led to greatly expanded annual and quarterly shareholder reports as the Company has sought to improve investor understanding of its financial position and operating performance. In 1974, Gulf became one of the first companies to include in its Annual Report to shareholders all of the information filed as its Annual Report on Form 10-K with the Securities and Exchange Commission (SEC). Since that time, however, the SEC has continued to adopt new requirements which preclude the compilation of the necessary 10-K information in time for inclusion with the Annual Report.

While the Company believes that its 1978 Annual Report includes all of the pertinent information necessary for shareholders, Gulf will supply copies of its Form 10-K report without charge upon request to: Vice President and Comptroller, Gulf Oil Corporation, P. O. Box 1166, Pittsburgh, Pennsylvania 15230.

## Annual Earnings

Earnings of \$791 million, or \$4.06 per share, in 1978, increased 5.2 percent from \$752 million, or \$3.86 per share, in 1977. Revenue rose 1.4 percent to \$20.1 billion from \$19.8 billion. Geographic and Related Business Segment Financial Data is presented on pages 43 and 44.

Increased refined product sales in both the United States and Europe, substantial benefits from coal and uranium operations, and a reduction in exploration expenses were the principal ingredients in the improved performance.

Earnings began on a low note in 1978 and improved in each succeeding quarter. While continued improvement is expected during 1979, the cyclical pattern of the past year is likely to be repeated. The oil strike in Iran, which is Gulf's second largest source of foreign crude, and the impact of the latest price increase by the Organization of Petroleum Exporting Countries could also hold down earnings during the early months of the year.

U.S. net income in 1978 was the highest in Gulf's history, reaching \$514 million, or 10 percent above the \$468 million earned in 1977. Largely on the strength of uranium sales, Canadian net income climbed 29 percent to \$138 million. As a result, 82 percent of Gulf's 1978 earnings were generated in North America. Foreign net income declined 21 percent to \$139 million.

Within the Company's principal business segments, operating earnings attributable to worldwide petroleum activities increased 2.5 percent to \$1.17 billion during the year. U.S. petroleum earnings increased 10 percent to \$793 million as significant improvements were registered in both refining and marketing and exploration and production operations.

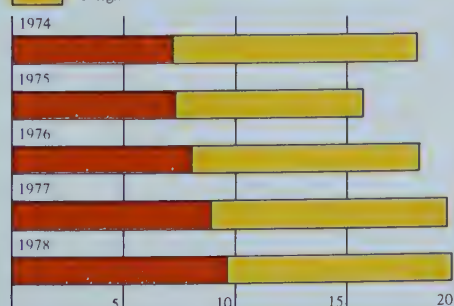
U.S. refining and marketing earnings of \$234 million were 12.5 percent ahead of 1977 as a three-percent increase in gasoline volume more than offset a decline in distillate sales.

The production of crude oil, natural gas liquids and natural gas in the U.S. generated operating earnings of \$559 million in 1978, a nine-percent increase from the prior year. Wellhead prices for oil and gas increased ten and nine percent, respectively, while geological, geophysical and wild-cat drilling activity was reduced by \$71 million. However, depreciation, depletion and amortization charges, reflecting the Company's increased investment in production equipment and exploratory leases, rose by \$86 million.

**Sales and Other Operating Revenues**  
Including Consumer Excise Taxes

Billions of Dollars

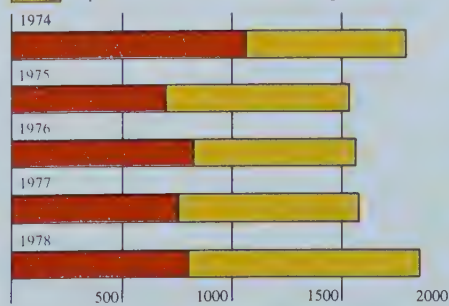
United States  
Foreign



**Funds From Operations**

Millions of Dollars

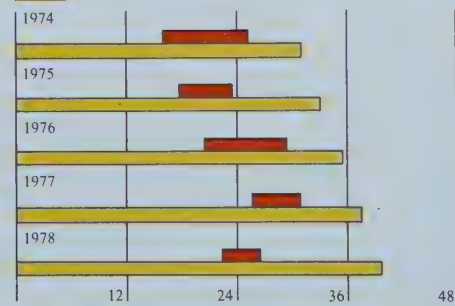
Net Income  
Depreciation and other Noncash Charges



**Book Value vs. Stock Price**

Dollars Per Share

Stock Price Range  
Book Value





Production of crude oil and natural gas liquids was essentially flat during the year at 400,100 barrels per day, while natural gas production rose one percent to 1.88 billion cubic feet per day, as the Company benefited from the inclusion in 1978 of Kewanee Industries, Inc., which was acquired in September 1977.

Deliveries of natural gas under Gulf's low, fixed-price contract to Texas Eastern Transmission Corporation averaged 694 million cubic feet per day during 1978, compared with 592 million in 1977. The sales were made at the contract price of 21 cents per thousand cubic feet although the increased volume came from newly developed fields in the Gulf of Mexico, which otherwise could have qualified for rates of about \$1.50 per thousand.

In Canada, higher wellhead prices enabled the Company to post a three-percent increase in 1978 operating earnings for exploration and production to \$215 million, despite a two-percent decline in crude oil production and a 10-percent drop in natural gas volumes. A limit on exports to the U.S. has resulted in between 20 and 25 percent of the Company's Canadian production being shut in. Refining and marketing earnings fell to \$28 million for the year from \$43 million in 1977 as severe market competition and overcapacity in eastern Canada reduced the volume of crude oil processed by 11 percent and refined product sales by five percent.

European petroleum operations showed marked improvement, particularly in the fourth quarter, but still recorded a \$9-million loss for the year. Gulf lifted its first two cargoes of North Sea crude oil during the year and recorded sharply lower exploration expenses. Higher gasoline sales in the final three months and the benefits of higher margins as the dollar declined in value against local currencies, in which revenues are realized, enabled refining and marketing operations to almost break even for the year. A \$20-million downstream profit in 1977 included a gain on last-in, first-out (LIFO) inventory reductions of \$46 million.

Other foreign petroleum operations generated earnings of \$147 million in 1978, compared with \$182 million in 1977. Foreign crude oil liftings declined eight percent during 1978 as a result of reduced demand early in the year, problems in Iran in the fourth quarter, and lower production and purchases in Angola under the participation agreement. On the plus side, higher volumes and government-granted price increases for refined products in Korea resulted in a substantial improvement in equity earnings.

Worldwide chemical operations continued to be a disappointment, although earnings rose to \$81 million from \$75 million a year earlier. In the U.S., earnings attributable to Harshaw and Millmaster Onyx, which were part of the Kewanee acquisition, nearly offset declines in basic petrochemicals and plastics. Overcapacity and deteriorating prices continued to hinder these traditional businesses, while start-up costs at two new plants also reduced 1978 results.

Minerals clearly constituted a bright spot as earnings climbed to \$45 million from \$10 million in 1977. Although coal profits doubled to \$32 million as production rose six percent to nine million tons, development work on uranium, oil shale and synthetic fuels projects resulted in a small

minerals loss in the U.S. in 1978. Canadian uranium operations also doubled in 1978 to \$51 million as total production climbed nine percent to 2.8 million pounds.

Gulf's share of losses at General Atomic Company widened to \$43 million for the year from \$18 million, largely as the result of an additional loss provision of \$25 million for the Fort St. Vrain plant in Colorado.

Gulf's U.S. income tax provision declined to \$187 million in 1978 from \$211 million in 1977, when an adjustment was made to increase the provision for taxes on prior-year, foreign-source income. Total foreign income taxes decreased by \$276 million in 1978 primarily reflecting lower taxes in Angola due to reduced equity production under the participation agreement.

Higher financial charges were recorded during 1978 as interest costs increased and interest income declined as a result of a drawdown in the Company's investment portfolio.

#### **Fourth-Quarter Earnings**

Earnings for the fourth quarter of 1978 were a record \$253 million, or \$1.30 per share, compared with earnings of \$175 million, or 90 cents per share, in 1977. The 44.6-percent gain reflected both an improvement in operations and the adverse effect in 1977 of a tax adjustment. Total revenue rose 6.9 percent to \$5.5 billion from \$5.1 billion.

Worldwide petroleum activities generated operating earnings of \$396 million, an increase of 12 percent over the final quarter of 1977. Within the U.S., petroleum earnings advanced by 38 percent to \$252 million from \$183 million. A 13-percent increase in gasoline sales to 520,000 barrels per day coupled with improved prices, enabled U.S. refining and marketing operations to double their earnings contribution to \$99 million. Because of lower exploration activity, U.S. oil and gas producing activities posted a \$20-million increase to \$153 million. Crude oil production declined six percent to 324,000 barrels per day, reflecting the natural decline in output from the Company's older fields.

Canadian petroleum earnings declined by three percent to \$72 million, largely due to reduced sales of natural gas.

North Sea production enabled European exploration and production operations to record earnings of \$2 million, compared with a \$5-million loss in the 1977 quarter. Higher gasoline sales resulted in earnings of \$14 million for European refining and marketing operations. Downstream earnings of \$35 million in the final 1977 period included LIFO inventory gains of \$28 million.

Earnings attributable to other foreign petroleum operations declined to \$56 million from \$67 million, largely as a result of reduced volume from Iran and Angola.

Improvements in Europe accounted for an increase in worldwide chemical earnings to \$29 million from \$19 million.

Minerals earned \$23 million, compared with a loss of \$3 million a year ago, when a coal strike shut down Gulf's midwestern mines. A portion of the \$25 million in Canadian uranium earnings recorded during the quarter was attributable to the sale of approximately 200,000 pounds of uranium at market prices to General Atomic. However, an off-



setting loss was recorded by General Atomic on this transaction and contributed to the \$21-million loss for the quarter. This loss also included a \$10-million loss provision for the Fort St. Vrain plant.

Total income tax expense was \$305 and \$379 million for the 1978 and 1977 fourth quarters, which equates to effective tax rates of 55 and 68 percent, respectively. These decreases primarily reflect lower U.S. taxes from a year ago when an adjustment was made to increase the provision for taxes on prior-year, foreign-source income. The decrease in foreign taxes primarily reflected lower taxes in Angola due to reduced equity production under the participation agreement.

### Quarterly Financial Data

The Company's unaudited results of operations for each quarterly period of 1978 and 1977 are summarized below.

	Millions of Dollars			
	Sales and Other Operating Revenues	Income Before Taxes on Income	Net Income	Net Income Per Share
<b>1978 Quarters</b>				
First .....	\$ 4,837	\$ 434	\$155	\$ .79
Second .....	4,666	464	175	.90
Third .....	4,991	470	208	1.07
Fourth .....	5,398	558	253	1.30
Year .....	<u>\$19,892</u>	<u>\$1,926</u>	<u>\$791</u>	<u>\$4.06</u>
<b>1977 Quarters</b>				
First .....	\$ 4,803	\$ 544	\$166	\$ .85
Second .....	4,761	593	216	1.11
Third .....	4,987	496	195	1.00
Fourth .....	5,044	554	175	.90
Year .....	<u>\$19,595</u>	<u>\$2,187</u>	<u>\$752</u>	<u>\$3.86</u>

### Debt

Long-term debt of \$1.49 billion at December 31, 1978 reflects an increase of \$182 million from the balance at December 31, 1977. This increase is due to \$321 million in new borrowings, primarily intermediate bank borrowings arranged to take advantage of their flexible provisions in a period of high interest rates, offset by maturities and a \$31-million prepayment of Swiss franc denominated debt, which completed a program of reducing the Company's hard currency indebtedness.

During 1978, the Company continued to utilize short-term financing arrangements and, at December 31, 1978, outstanding short-term notes and commercial paper totaled \$136 million which represented eight percent of total debt. In addition, the Company continued its sales of customer accounts receivable to its affiliated domestic finance subsidiary.

Although long-term debt increased during 1978, the Company's debt-to-capitalization ratio was only 16 percent at December 31, 1978. Obligations payable in foreign currencies were 13 percent of long-term debt at year-end 1978, compared with 16 percent at the end of 1977. Canadian dollar indebtedness of Gulf Canada of \$139 million represents 73 percent of foreign currency long-term debt at December 31, 1978.

### Working Capital

During 1978, cash and marketable securities decreased by \$80 million to \$1.08 billion. This balance represented 73 percent of long-term debt at December 31, 1978.

The decrease in cash and marketable securities was partially offset by a \$57-million increase in noncash working capital which resulted in a decrease in working capital of \$23 million in 1978, compared with a \$1.04 billion decrease in 1977.

The increase in noncash working capital was due primarily to an increase in accounts receivable and reductions in notes payable and the U.S. and foreign income tax liability, partially offset by an increase in other current liabilities.

Working capital of \$922 and \$945 million at December 31, 1978 and 1977, respectively, represented approximately nine percent of employed capital at the end of those years.

### Expenditures

During 1978, the Company spent \$2.13 billion on worldwide capital and exploration projects. Total expenditures by the Company for the expansion, improvement and replacement of properties, business investments and exploration and dry hole expenses were distributed as follows:

	Millions of Dollars	
	1978	1977
<b>Petroleum</b>		
Exploration and development		
United States—Oil and gas .....	\$ 838	\$1,239
Canada—Oil and gas .....	184	214
Canada—Tar Sands .....	72	97
Europe—North Sea .....	143	101
Other Foreign .....	107	78
Total .....	1,344	1,729
Natural gas liquids .....	60	63
Refining and marketing .....	309	314
International marine .....	22	77
Total Petroleum .....	1,735	2,183
Chemicals .....	139	174
Minerals .....	192	120
Corporate .....	15	67
<b>Business investments</b>		
Kewanee Industries, Inc. ....	—	455
Other .....	48	14
	<u>\$2,129</u>	<u>\$3,013</u>

### Oil and Gas Accounting Standards

Beginning in 1979, the Company will modify its successful efforts accounting practices for oil and gas exploration and production activities to comply with new SEC regulations.

The major changes which Gulf will make as a result of the new requirements will be the capitalization of development dry hole costs and changes in the methods of amortizing capitalized costs, including the acquisition costs of unproved properties.



These changes, which will be implemented effective January 1, 1979, are not expected to have a material effect on either retained earnings or net income. However, the implementation of these changes in 1979 may result in a restatement of 1978 and prior year financial statements.

### Foreign Currency

Foreign currency exchange adjustments increased other revenues by \$14 million in 1978 and had no effect in 1977. The increase in 1978 resulted primarily from translation of Canadian dollar-denominated debt as that currency weakened in respect to the U.S. dollar. In 1977, a similar beneficial effect was offset by losses in the translation of foreign currency-denominated working capital.

The Company's exposure to translation adjustments is limited as its foreign currency-denominated debt has been significantly reduced in recent years.

Changes in the U.S. dollar value of foreign currencies have an effect on the Company's results of operations in countries where sales revenues are received in foreign currencies. Since the Company's foreign crude oil purchase costs are generally U.S. dollar denominated, such costs are not subject to currency effects. In both 1978 and 1977, the strengthening of foreign currencies against the U.S. dollar benefited foreign operations. These benefits are reflected in higher net operating revenues.

### Capital Stock and Dividends

Gulf's Capital Stock is listed on the New York, Midwest, Toronto and Swiss stock exchanges. The New York Stock Exchange is the principal market in which the Company's Capital Stock is traded. The following table sets forth the high and low sales prices of the Company's stock during the period indicated, as reported by *The Wall Street Journal*.

	Market Prices Per Share				
	1978	1977	1976	1975	1974
High .....	\$26 $\frac{5}{8}$	\$30 $\frac{7}{8}$	\$29 $\frac{1}{4}$	\$23 $\frac{1}{2}$	\$25 $\frac{1}{4}$
Low .....	22 $\frac{1}{4}$	25 $\frac{7}{8}$	20 $\frac{3}{8}$	17 $\frac{5}{8}$	16
Close .....	23 $\frac{3}{8}$	26 $\frac{3}{4}$	28 $\frac{7}{8}$	20 $\frac{1}{2}$	17 $\frac{3}{8}$
Shares traded (Thousands) .....	34,634	24,249	34,778	23,190	16,375

Quarters	Quarterly Stock Price Ranges and Dividends					
	1978			1977		
	High	Low	Div.	High	Low	Div.
First .....	\$26 $\frac{5}{8}$	\$23 $\frac{3}{4}$	\$.475	\$30 $\frac{7}{8}$	\$27 $\frac{1}{2}$	\$.45
Second .....	25 $\frac{3}{8}$	23	.475	29 $\frac{1}{2}$	26 $\frac{7}{8}$	.45
Third .....	25 $\frac{7}{8}$	22 $\frac{1}{2}$	.475	30 $\frac{1}{8}$	26 $\frac{3}{8}$	.475
Fourth .....	25 $\frac{7}{8}$	22 $\frac{1}{4}$	.475	28 $\frac{7}{8}$	25 $\frac{7}{8}$	.475

Over the past five years, the Company's stock has consistently traded below book value as measured by Shareholders' Equity per share. The closing price for the year of \$23.375 equated to 59 percent of Shareholders' Equity of \$39.78 per share.

Gulf's annual dividends per share have increased each year since 1973, and over the past five years have averaged 41 percent of earnings. Cash dividends of \$1.90 per share in 1978 represented 47 percent of earnings and provided Gulf's shareholders with a return of 7.8 percent on the average stock price of \$24.375 per share.

Gulf's automatic Dividend Reinvestment Plan, available to all shareholders, was amended on January 1, 1979. The plan is now administered by the Company without a service charge, although participants do proportionately share in the brokerage fees. Some 20,000 shareholders enrolled in the plan during 1978, lifting the number of participants at year-end to 51,134, or 17 percent of the individual accounts. Shareholders wishing to take advantage of this plan should write to: Gulf Oil Corporation, Dividend Reinvestment Plan, P. O. Box 1166, Pittsburgh, Pennsylvania 15230.

Financial Ratios	Year Ended December 31				
	1978	1977	1976	1975	1974
Short-term ratios:					
Cash and marketable securities to current liabilities .....	.26	.27	.47	.50	.43
Acid-test (a) .....	.89	.89	1.17	1.13	1.12
Current assets to current liabilities .....	1.22	1.22	1.47	1.48	1.40
Current debt to total debt (including current portion) .....	.12	.17	.11	.14	.11
Capital and long-term ratios:					
Long-term debt to total capitalization (b) .....	.16	.15	.14	.17	.19
Net properties to long-term debt .....	6.09	6.37	5.68	4.82	4.10
Interest coverage (c) .....	7.23	7.84	8.49	7.25	9.80
Return on investment ratios:					
Income as a percent of average employed capital (d) .....	8.73	8.91	10.42	9.55	14.55
Net income as a percent of average shareholders' equity .....	10.48	10.53	12.18	11.16	18.65
Performance ratios:					
Net income as a percent of sales (e) .....	4.38	4.22	4.96	4.91	6.47
Sales to total assets (e) .....	1.20	1.25	1.22	1.15	1.31
Dividend ratios:					
Percent of net income .....	47	48	41	47	29
Percent of cash flow (f) .....	20	23	22	22	17
Yield on average stock price .....	7.79	6.52	6.97	8.27	7.66

Amounts used above which are not defined elsewhere in this report are represented by the following:

- (a) Acid-test: cash, marketable securities and receivables to current liabilities.
- (b) Capitalization: total of long-term debt and shareholders' equity.
- (c) Interest coverage: ratio of net income and interest expense to interest expense.
- (d) Income: net income and minority interest and interest expense net of tax.
- (e) Sales: sales and other operating revenues less consumer excise taxes.
- (f) Cash flow: funds from operations.



# Consolidated Statement of Income and Retained Earnings

	Millions of Dollars Year Ended December 31	
	1978	1977
<b>REVENUES</b>		
Sales and other operating revenues (including consumer excise taxes) .....	<b>\$19,892</b>	\$19,595
Interest income .....	<b>123</b>	149
Equity in earnings (Note 10) .....	<b>23</b>	25
Other revenues (Note 24) .....	<b>59</b>	47
	<b><u>20,097</u></b>	<u>19,816</u>
<b>DEDUCTIONS</b>		
Purchased crude oil and products .....	<b>10,867</b>	10,936
Operating expenses .....	<b>1,793</b>	1,521
Selling, general and administrative expenses .....	<b>1,502</b>	1,415
Taxes other than income taxes (Note 7) .....	<b>2,354</b>	2,192
Depreciation, depletion, amortization and retirements (Note 9) .....	<b>826</b>	684
Exploration and dry hole expenses (Note 8) .....	<b>401</b>	490
Department of Energy entitlements .....	<b>251</b>	232
Interest on long-term financing .....	<b>127</b>	110
Income applicable to minority interests .....	<b>50</b>	49
	<b><u>18,171</u></b>	<u>17,629</u>
<b>INCOME BEFORE TAXES ON INCOME</b> .....	<b><u>1,926</u></b>	<u>2,187</u>
<b>TAXES ON INCOME</b> (Note 7)		
United States .....	<b>187</b>	211
Foreign .....	<b>948</b>	1,224
	<b><u>1,135</u></b>	<u>1,435</u>
<b>NET INCOME</b> .....	<b>791</b>	752
<b>RETAINED EARNINGS AT BEGINNING OF YEAR</b> .....	<b>6,192</b>	5,800
<b>CASH DIVIDENDS</b> .....	<b>(371)</b>	(360)
<b>RETAINED EARNINGS AT END OF YEAR</b> .....	<b><u>\$ 6,612</u></b>	<u>\$ 6,192</u>
<b>PER-SHARE DATA</b>		
Net income .....	<b><u>\$ 4.06</u></b>	<u>\$ 3.86</u>
Cash dividends .....	<b><u>\$ 1.90</u></b>	<u>\$ 1.85</u>

Certain amounts for 1977 have been reclassified to conform to presentation adopted in 1978.

The notes on pages 30 to 44 are an integral part of the financial statements.



# Consolidated Statement of Financial Position

	Millions of Dollars December 31	
	1978	1977
<b>ASSETS</b>		
Current assets		
Cash and marketable securities (Note 2) .....	\$ 1,084	\$ 1,164
Receivables (less allowances of \$44 and \$44 million) (Note 3) .....	2,674	2,596
Inventories (Note 4) .....	1,339	1,369
Prepaid expenses .....	65	58
Total current assets .....	5,162	5,187
Properties (less accumulated depreciation of \$6,718 and \$6,347 million) (Note 9) .....	9,063	8,332
Investments in affiliated and associated companies (Note 10) .....	605	468
Long-term receivables and other investments (less allowances of \$40 and \$57 million) (Note 11) .....	154	200
Deferred charges .....	52	48
<b>TOTAL ASSETS</b> .....	<b>\$15,036</b>	<b>\$14,235</b>
<b>LIABILITIES</b>		
Current liabilities		
Accounts payable .....	\$ 2,379	\$ 2,416
Notes payable and current long-term debt (Notes 13 and 14) .....	205	264
Consumer sales and excise taxes payable .....	148	135
Accrued United States and foreign income taxes .....	384	469
Other current liabilities .....	1,124	958
Total current liabilities .....	4,240	4,242
Long-term debt (Note 13) .....	1,489	1,307
Deferred production payment proceeds (Note 16) .....	88	120
Deferred income taxes (Note 7) .....	814	619
Other long-term liabilities .....	183	179
Minority interests (Note 17) .....	465	431
<b>TOTAL LIABILITIES</b> .....	<b>7,279</b>	<b>6,898</b>
<b>SHAREHOLDERS' EQUITY</b>		
Capital stock—authorized 300,000,000 shares, without par value; issued 211,910,826 shares stated at .....	883	883
Paid-in capital .....	697	698
Retained earnings .....	6,612	6,192
	8,192	7,773
Less 16,914,831 and 16,942,335 shares in treasury, at cost (Note 21) .....	435	436
<b>TOTAL SHAREHOLDERS' EQUITY</b> .....	<b>7,757</b>	<b>7,337</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b> .....	<b>\$15,036</b>	<b>\$14,235</b>

Certain amounts for 1977 have been reclassified to conform to presentation adopted in 1978.

The notes on pages 30 to 44 are an integral part of the financial statements.



# Consolidated Statement of Changes in Financial Position

	Millions of Dollars Year Ended December 31	
	1978	1977
<b>FUNDS PROVIDED BY:</b>		
Net income .....	\$ 791	\$ 752
Income charges (credits) not affecting funds:		
Depreciation, depletion, amortization and retirements .....	826	684
Income applicable to minority interests .....	50	49
Deferred income taxes .....	210	136
Other credits .....	(30)	(36)
Funds from operations .....	1,847	1,585
New financing including production payment proceeds .....	321	233
Working capital acquired—Kewanee Industries, Inc. (Note 15) .....	—	125
Proceeds from sales of properties .....	106	79
Reductions of investments and long-term receivables .....	92	65
Other—net .....	11	13
	<u>2,377</u>	<u>2,100</u>
<b>FUNDS USED FOR:</b>		
Properties and business investments .....	1,728	2,068
Acquisition of Kewanee Industries, Inc. (Note 15) .....	—	455
Dividends .....	371	360
Reductions of long-term debt and production payments .....	166	171
Increases in investments and long-term receivables .....	135	85
	<u>2,400</u>	<u>3,139</u>
DECREASE IN WORKING CAPITAL .....	<u>(23)</u>	<u>(1,039)</u>
<b>LESS INCREASE (DECREASE) IN NONCASH WORKING CAPITAL:</b>		
Receivables .....	78	(311)
Inventories .....	(30)	127
Prepaid expenses .....	7	17
Accounts payable .....	37	(99)
Notes payable and current long-term debt .....	59	(125)
Accrued income taxes .....	85	96
Other current liabilities .....	(179)	81
	<u>57</u>	<u>(214)</u>
DECREASE IN CASH AND MARKETABLE SECURITIES .....	<u>\$ (80)</u>	<u>\$ (825)</u>
CASH AND MARKETABLE SECURITIES AT END OF YEAR (Note 2) .....	<u><u>\$1,084</u></u>	<u><u>\$1,164</u></u>

Certain amounts for 1977 have been reclassified to conform to presentation adopted in 1978.

The notes on pages 30 to 44 are an integral part of the financial statements.



# Notes to Financial Statements

## Note 1—Summary of Accounting Policies

This summary of the major accounting policies of Gulf Oil Corporation and its consolidated subsidiaries is presented to assist the reader in evaluating the Company's financial statements. The accounting policies employed by the Company are in accordance with generally accepted accounting principles in the United States. In those instances in which more than one generally accepted accounting principle can be applied, the Company has adopted and consistently applied in all material respects the accounting principle which it believes most accurately and fairly reflects its financial position and results of operations.

### Exploration and Development Expenditures

#### *Oil and Gas*

In the petroleum industry, the most significant accounting policy relates to the method of accounting for the exploration and the development of oil and gas reserves. In this regard, the Company's capitalization policy follows the "successful effort" concept in that drilling and equipment costs are capitalized only on successful wells. All exploratory costs including successful geological and geophysical costs, annual delay rentals on undeveloped leases and all dry hole costs are charged to income as incurred. The costs of drilling discovery wells in remote frontier areas where future production is not reasonably assured are also charged to income as incurred. See Oil and Gas Accounting Standards on page 25 in the Financial Review.

#### *Minerals*

Exploration and development expenditures are charged to income as incurred until a project is determined to be economically feasible. Expenditures subsequent to such determination are capitalized and amortized in accordance with the Company's policy.

### Depreciation, Depletion, Amortization and Retirements

#### *Oil and Gas*

Provisions for depreciation, depletion and amortization of lease and well equipment, intangible drilling costs applicable to productive wells, and undeveloped and developed leasehold costs represent charges per unit of production based on the estimated proved developed oil and gas reserves in each country. Undeveloped leasehold costs in countries where production has not yet commenced are amortized on a straight-line basis over five years. See Oil and Gas Accounting Standards on page 25 in the Financial Review.

#### *Minerals*

Provisions for depreciation, depletion and amortization of capitalized exploration and development expenditures follow the unit-of-production method based on estimated developed recoverable reserves of individual producing properties.

#### *Other*

Provisions for depreciation and amortization of all other properties are generally determined on the group basis using the straight-line method based on estimated remaining economic useful lives of groups of related properties. Rates are revised when a change in life expectancy becomes apparent.

#### *Retirements, Maintenance and Repairs*

Properties retired or otherwise disposed of are eliminated from the property accounts and the amounts, after adjustment for salvage and dismantling expenses, are charged to accumulated depreciation or depletion. Only gains and losses on extraordinary retirements or retirements involving entire groups of properties are charged or credited to income.

Maintenance and repairs are charged to income, and renewals and betterments which extend the economic useful life of properties are capitalized.

### Principles of Consolidation

The accounts of Gulf Oil Corporation and all subsidiary companies more than 50-percent owned are included in the consolidated financial statements except for a subsidiary engaged in insurance activities and a domestic finance subsidiary. The insurance and finance subsidiaries (affiliated companies) and all other investments 20-to-50-percent owned (associated companies) are accounted for on the equity method. The only significant majority-owned subsidiary is Gulf Canada Limited in which the Company has a 68-percent interest.

Intercompany transactions are eliminated in consolidation.

### Translation of Foreign Currency

Balances and transactions in foreign currencies have been translated to U.S. dollars as follows: cash, receivables, current liabilities, long-term debt and minority interest—at current rates; all other assets and liabilities—at historical rates; revenues and expenses (except those that relate to assets and liabilities translated at historical rates)—at average monthly rates. Gains or losses on foreign currency translation are included in results of operations in the period incurred.

### Inventory Valuation

Crude oil, petroleum products, chemicals and certain merchandise inventories generally are valued at cost applied on the "last-in, first-out" (LIFO) basis, which in the aggregate is lower than market value. Inventories of Canadian subsidiaries and of certain industrial and specialty chemicals generally are valued at the lower of cost applied on a "first-in, first-out" (FIFO) basis or market value. Materials and supplies are valued at average cost or less depending on the condition of the items.



## Income Taxes

Deferred income taxes have been provided for those items of revenue and expense which have been recognized in different periods for financial reporting and income tax purposes. Investment tax credits are accounted for as a reduction of income taxes in the year in which the qualified assets are placed in service to the extent that such credits are allowable.

## Crude Oil Transactions

In addition to its own production, the Company purchases large volumes of crude oil from other producers and sells crude oil not required for its own use. The Company records such purchases as purchase costs and such sales as revenues except that Gulf Canada nets such crude oil sales revenues against crude oil purchase costs, because of the brokerage nature of its crude oil transactions.

## Interest Costs

Interest costs are charged to income as incurred.

## Pensions

Pension costs are determined by outside actuaries. Payments are generally made in the year following accrual. Prior service costs are amortized and funded over varying periods for the different plans but generally for no more than 15 years.

## Research and Development Expenditures

Research and development expenditures are charged to income as incurred.

## Earnings Per Share

Earnings per share is calculated based upon the daily weighted average of the number of shares outstanding during the year.

## Note 2—Cash and Marketable Securities

	Millions of Dollars	
	December 31	
	1978	1977
Cash .....	\$ 121	\$ 67
Time deposits and certificates of deposit ..	618	578
Marketable securities .....	345	519
	<u>\$1,084</u>	<u>\$1,164</u>
United States .....	\$ 347	\$ 342
Canada .....	286	248
Europe .....	201	248
Other Foreign .....	250	326
	<u>\$1,084</u>	<u>\$1,164</u>

Marketable securities are stated at cost, which approximates market.

## Note 3—Receivables

	Millions of Dollars	
	December 31	
	1978	1977
Customers .....	\$1,959	\$1,796
Affiliated and associated companies .....	318	417
Other receivables .....	441	427
	<u>2,718</u>	<u>2,640</u>
Allowance for doubtful accounts .....	(44)	(44)
	<u>\$2,674</u>	<u>\$2,596</u>
United States .....	\$ 728	\$ 606
Canada .....	473	493
Europe .....	401	370
Other Foreign .....	1,072	1,127
	<u>\$2,674</u>	<u>\$2,596</u>

In 1978 and 1977, provisions of \$5 and \$18 million, respectively, were credited to the allowance for doubtful accounts. Other charges and credits, principally write-offs and recoveries, were \$7 and \$2 million, respectively, in 1978 and \$9 and \$3 million, respectively, in 1977. In addition \$16 million of the allowance for doubtful accounts was transferred to the Company's affiliated domestic finance subsidiary in 1977 in connection with the sale to it of customer receivables.

## Note 4—Inventories

	Millions of Dollars	
	December 31	
	1978	1977
LIFO		
Petroleum		
United States .....	\$ 333	\$ 279
Europe .....	186	113
Other Foreign .....	21	74
Chemicals		
United States .....	63	74
Europe .....	13	24
Other Foreign .....	5	5
Merchandise .....	10	13
	<u>631</u>	<u>582</u>
FIFO		
Petroleum (Canada) .....	306	406
Chemicals .....	106	98
Other .....	27	20
	<u>439</u>	<u>524</u>
Average Cost		
Materials and supplies .....	253	239
Other .....	16	24
	<u>269</u>	<u>263</u>
	<u>\$1,339</u>	<u>\$1,369</u>
United States .....	\$ 643	\$ 571
Canada .....	373	466
Europe .....	226	162
Other Foreign .....	97	170
	<u>\$1,339</u>	<u>\$1,369</u>

Quantity decreases in certain LIFO pools increased earnings by \$15 and \$54 million, after considering taxes, in 1978 and 1977, respectively. LIFO inventories were \$1.31 and \$1.19 billion less than current cost at December 31, 1978 and 1977, respectively.



## Note 5—Nuclear Partnership and Related Litigation

The Company and Scallop Nuclear Inc., a Royal Dutch/Shell Group Company, own and operate General Atomic Company, a 50-50 partnership engaged in the nuclear business. This business includes nuclear research and development activities, the construction of the Fort St. Vrain plant, a 50-percent interest in Allied-General Nuclear Services (AGNS) and uranium and light water fuel supply activities. The partnership agreement provides that the capital requirements of the partnership will be contributed equally by the partners, except that by a 1978 amendment to the partnership agreement, Gulf has assumed responsibility for a major portion of the partnership's capital requirements related to an anticipated uranium shortfall in 1979 and 1980 which is discussed later in this footnote.

The investment in this partnership is accounted for on an equity basis. At December 31, 1978, the Company's share of losses exceeded its investment by \$11 million and at December 31, 1977 the Company's investment exceeded its share of losses by \$4 million. These investments are reflected in the accompanying Statement of Financial Position as follows:

	Millions of Dollars	
	December 31	
	1978	1977
Investments in affiliated and associated companies .....	\$ 52	\$ 14
Other current liabilities .....	(63)	(10)
Net investment .....	<u>\$(11)</u>	<u>\$ 4</u>

The amount included in other current liabilities represents the Company's anticipated capital requirements for the subsequent year related to previously recorded loss provisions and the anticipated uranium shortfall in 1979 and 1980.

The net investment in this partnership is summarized below:

	Millions of Dollars	
	December 31	
	1978	1977
Current assets .....	\$ 21	\$ 16
Investment in AGNS .....	54	54
Net properties .....	13	14
Other assets .....	5	5
Total assets .....	<u>93</u>	<u>89</u>
Current liabilities .....	30	20
Provision for future losses .....	74	65
Total liabilities .....	<u>104</u>	<u>85</u>
Net investment .....	<u>\$(11)</u>	<u>\$ 4</u>

Changes in the Company's investment during the years ended December 31, 1978 and 1977 are summarized as follows:

	Millions of Dollars	
	1978	1977
Net investment January 1 .....	\$ 4	\$(30)
Operating losses—U.S. ....	(16)	(16)
—Foreign .....	(2)	(2)
Provision for future losses .....	(25)	—
Additional investments .....	28	52
Net investment December 31 .....	<u>\$(11)</u>	<u>\$ 4</u>

The Company's share of losses realized and charged to the provision for future losses were \$16 and \$32 million in the years 1978 and 1977, respectively.

In 1978, efforts continued to resolve the prolonged mechanical and regulatory problems which have prevented full-power operation of the Fort St. Vrain plant that was constructed for the Public Service Company of Colorado (PSC). As a result of additional problems encountered, the acceptance of the plant by PSC was further delayed and resulted in additions to the provision for future losses of which the Company's share was \$25 million.

Negotiations for the acceptance of the plant by PSC are in progress. While a definitive agreement remains to be developed, it is anticipated that General Atomic will provide certain substantial payments, certain equipment, parts and technical services to PSC over the next several years. The company expects that the major portion of the estimated cost of the agreement under discussion will be covered by the provision for future losses recorded at December 31, 1978.

In connection with its nuclear business, General Atomic has entered into arrangements for the purchase of uranium to meet its nuclear fuel commitments to electric utilities. Since 1974, efforts by certain uranium suppliers to avoid fulfilling their contracts with General Atomic have resulted in extensive litigation. This, in turn, has led to controversies with certain electric utilities to which General Atomic had committed (or is alleged to have committed) uranium. Some progress has been made toward resolving these uranium disputes. At present, sales arrangements may exist for up to 24 million pounds of uranium at an average price of \$17 per pound. Under these sales arrangements 13 million pounds are currently in litigation which is described below. While the deliveries under these sales arrangements extend over the next 10 years, the current spot market price for uranium is approximately \$43 per pound. General Atomic has purchase arrangements for 38 million pounds of uranium from non-related supplier companies. Four lawsuits with uranium suppliers are currently pending which affect 36 million pounds of this supply. In seeking to avoid their contracts, the uranium suppliers generally allege fraud, commercial impracticability, mutual mistake and violation of antitrust laws. If these suppliers were held to be relieved of their contractual obligations to General Atomic, such result may or may not relieve General Atomic of its disputed commitments to the electric utilities. Certain allegations in the litigation with uranium suppliers relate to the period prior to the formation of General Atomic when its business was wholly owned by the Company.

The principal lawsuit with uranium suppliers, involving two contracts covering 22 million pounds of uranium at specified prices, was brought by United Nuclear Corporation on December 31, 1975 in the Santa Fe District Court, State of New Mexico. Trial commenced in late 1977 and was halted in March 1978 when the trial court rendered a default judgment against General Atomic because in the court's view it had not furnished certain documents and information. General Atomic's position is that such documents and information were either furnished or could not be furnished because of prohibitions of Canadian law. The principal effect of the default judgment and subsequent orders of the court was to void United Nuclear's uranium supply contracts, to establish damages aggregating \$22 million in



favor of United Nuclear and Indiana & Michigan Electric Company (a party joined in the suit) and to direct General Atomic's specific performance of its contract with Indiana & Michigan, as discussed below. General Atomic has appealed the trial court's actions to the New Mexico Supreme Court, where briefs have been filed. Apart from its appeal, General Atomic is seeking to have most of its disputes with United Nuclear resolved in an arbitration proceeding commenced by General Atomic after the New Mexico trial court order blocking arbitration was overturned by the United States and New Mexico Supreme Courts in June 1978. Legal issues concerning jurisdictional matters are being considered by the panel. Although there is no assurance that the trial court will be reversed on appeal or that, if it is reversed, General Atomic will succeed in a trial on the merits or in any arbitration proceeding, the Company continues to believe that General Atomic has relevant and meritorious defenses to the United Nuclear suit and ultimately ought to substantially prevail.

Two other suits with uranium suppliers are also pending in New Mexico. One was instituted by General Atomic on February 10, 1976 in the State District Court in Albuquerque against Ranchers Exploration and Development Corporation and HNG Oil Company involving the validity of a contract to supply two million pounds of uranium at specified prices with an option for up to an additional five million pounds on a cost-plus basis. In early 1979, the parties to this lawsuit reached an understanding in principle on a basis for a compromise settlement. If the settlement is not consummated, court proceedings are expected to resume in April 1979. The second, brought by Reserve Oil & Minerals Corporation and Sohio Petroleum Company in the United States District Court for New Mexico on September 22, 1977, essentially seeks rescission of a supply contract covering 5.5 million pounds of uranium. General Atomic has filed a counterclaim seeking \$230 million in actual damages and \$230 million in punitive damages for breach of contract. This proceeding is in the discovery stage and no trial date has been set.

The fourth lawsuit with a supplier was instituted by General Atomic on April 7, 1978 against Exxon Nuclear Company, Inc. in the United States District Court for the Southern District of California seeking a declaration of the validity of a contract to supply six million pounds of uranium. The defendant and Exxon Corporation have counterclaimed against General Atomic, the Company and Scallop Nuclear seeking a declaration that the supply contract is void and treble damages in an unspecified amount. This action is in the discovery stage and no trial date has been set.

General Atomic's alleged commitments to supply approximately 13 million pounds of uranium to three utilities are in dispute. In March 1978, General Atomic settled its dispute with a fourth utility, The Detroit Edison Company, with some increase in price. One of the pending disputes is with Indiana & Michigan Electric Company which had been joined in the United Nuclear suit discussed above. The New Mexico trial court, following the default judgment referred to above, ordered General Atomic to perform its contract to deliver 3.2 million pounds of uranium to and fabricate fuel

for Indiana & Michigan at an additional cost of \$19 million and to pay money damages of approximately \$16 million.

In proceedings involving the disputes with the other two utility companies, General Atomic is seeking determinations that it has no pending commitments to deliver 9.5 million pounds of uranium to such utilities. One of these, an arbitration proceeding involving Commonwealth Edison Company (in which United Nuclear is also a party), is expected to be heard in Chicago in 1979. The other proceeding was commenced by Pennsylvania Power and Light Company in November 1974 in the Court of Common Pleas, Lehigh County, Pennsylvania, and should be tried also this year.

The Company believes that General Atomic has relevant and meritorious defenses to the allegations and the issues raised by both the uranium suppliers and the electric utilities and, therefore, believes that General Atomic ought to substantially prevail in this uranium litigation.

The outcome of the uranium disputes will largely determine General Atomic's long-term uranium requirements and its ability to meet its obligations to the electric utilities. The sales commitments (including those being contested, as discussed above) with the utilities call for deliveries of various amounts through 1988. Pending resolution of the litigation, General Atomic expects that in 1979 and 1980 it faces a uranium shortfall of up to 3.2 million pounds, which at current market prices would cost approximately \$97 million in excess of sales revenues from the utilities. By a 1978 amendment to the partnership agreement, the Company has agreed to use its best efforts to sell General Atomic sufficient quantities of uranium from its existing production sources to substantially cover such shortage. Although General Atomic's selling prices to the electric utilities will be significantly below current market prices, the Company does not expect to incur a significant loss on a consolidated basis because projected costs are expected to approximate the average of such selling prices. Although the Company will not realize the substantial profit which otherwise might have resulted if such uranium were sold at current market prices during 1979 and 1980, the Company expects that the economic impact of providing this uranium will eventually be recovered from General Atomic.

Scallop Nuclear has stated that it expects the Company to be fully responsible for any economic impact of the uranium litigation on General Atomic which might result from antitrust allegations against the Company. In discussions with the Company concerning General Atomic, Scallop Nuclear has also contended that the Company might have certain other liabilities to Scallop Nuclear or General Atomic in connection with General Atomic's formation or related to its uranium and light water fuel supply activities. Pending the resolution of these matters, the partners concur in the method of handling General Atomic's 1979 and 1980 interim uranium shortage discussed above. Currently, the partners have under consideration a proposal that the Company acquire Scallop Nuclear's fifty percent interest in General Atomic's uranium and light water fuel supply activities (which exclude nuclear research and development activities, the Fort St. Vrain Project and the AGNS investment) for a cash payment by the Company in which event, after an exchange of releases, all profits or losses arising from



those activities and the litigation discussed above would be for the account of the Company.

The Company believes that resolution of the matters discussed in this footnote, taken as a whole, will not have a material adverse effect on the Company's consolidated financial position and no provision for loss has been made.

Allied-General Nuclear Services (AGNS), a partnership of General Atomic and Allied Chemical Nuclear Products, Inc., has built a facility at Barnwell, South Carolina, to recover uranium and plutonium from the spent fuel of nuclear reactors. The Company's share of the investment in AGNS is \$54 million. The viability of this plant and performance under related fuel-reprocessing agreements depends upon the resolution of several uncertainties, including licensing problems, nuclear proliferation issues, government funding and certain other matters subject to government regulation.

President Carter has stated that commercial reprocessing of spent nuclear fuel will be indefinitely deferred and government policies have created substantial uncertainties for the future of commercial spent fuel reprocessing in the U. S. It is the Company's view that commercial reprocessing by private companies will not be permitted in the U. S. in the foreseeable future, and that, for this reason among others, AGNS is excused from performing existing contracts for reprocessing services.

AGNS continued in a research and development mode during 1978 with a major portion of the operating funds provided under a Department of Energy contract. While the decisions of the President and current government policies have adversely affected prospects for commercial operation of the Barnwell facility and could jeopardize the Company's investment, the Company continues to believe that the use of the Barnwell facility will be of important assistance in the ultimate solution of the handling of spent nuclear fuel resulting from the operation of nuclear reactors. Accordingly, the Company has made no provision for loss on its share of General Atomic's investment in AGNS.

#### **Note 6—Uranium Litigation**

On October 15, 1976, Westinghouse Electric Corporation filed a complaint in the United States District Court for the Northern District of Illinois against the Company and 28 other uranium producers, including a subsidiary of the Company. The complaint alleges that the defendants have fixed and increased prices and other terms of uranium sales, have allocated the market and have refused to deal with certain uranium purchasers, including plaintiff, in violation of federal antitrust laws. Plaintiff seeks injunctive relief plus treble damages in an unspecified amount. In May 1978, the Company filed its answer denying the allegations of unlawful conduct and asserting the defenses of the Act of State Doctrine and foreign compulsion. In addition, the Company filed a counterclaim alleging that Westinghouse had monopolized the manufacture and sale of nuclear reactors and fabricated nuclear fuel and the sale of uranium and had engaged in illegal combinations and conspiracies and unfair competition to destroy the Company in the nuclear reactor and fabricated nuclear fuel business. The Company's counterclaim seeks treble damages in an unspecified amount and an injunction against further unlawful con-

duct by Westinghouse.

Other developments in this lawsuit during 1978 mainly involved document and interrogatory discovery, which had been stayed pending rulings on motions of the Company and other defendants to disqualify counsel for Westinghouse. After the District Court had denied such motion, the Seventh Circuit Court of Appeals reversed the lower court, and counsel for Westinghouse (as well as counsel for United Nuclear, which is also a defendant) were disqualified. Trial of this action is scheduled to commence in 1980.

On November 18, 1977, the Tennessee Valley Authority (TVA) brought suit against eight companies engaged in the production or marketing of uranium, including the Company and one of its subsidiaries. The complaint filed in the United States District Court for the Eastern District of Tennessee alleges that the defendants have combined and conspired to fix the price of uranium in violation of federal antitrust laws and have violated the Tennessee Valley Authority Act. Plaintiff seeks treble damages in an unspecified amount, plus injunctive relief. The Company and its subsidiaries have denied TVA's allegations, have filed appropriate defenses and have moved to dismiss the count alleging a violation of the Tennessee Valley Authority Act. In July 1978, the United States Judicial Panel on Multi-District Litigation ordered that the litigation be consolidated for purposes of discovery with the Westinghouse suit in the United States District Court for the Northern District of Illinois. Discovery proceedings are under way, but no trial date has been set.

Both Westinghouse and TVA have specifically charged that the Company's involvement with a foreign uranium marketing arrangement or "cartel" had a substantial effect in increasing the price of uranium, and that those plaintiffs may sustain substantial damages as a result of the alleged marketing arrangement. Such charge is also involved in certain issues in other litigation described in Note 5. The Company denies such assertion. Its position is that its Canadian subsidiary was required by the Canadian government to participate in the foreign uranium marketing arrangement. The Canadian government has transmitted several diplomatic notes and filed an "amicus" brief which the Company has used to support its position. The Company further denies that such involvement had any substantial effect in increasing the price of uranium or otherwise constituted a violation of antitrust laws.

The Company believes that it has relevant and meritorious defenses to the allegations made by both Westinghouse and TVA. The Company further believes that the resolution of the uranium litigation with Westinghouse and TVA will not have a material adverse effect on the Company's consolidated financial position and no provision for loss has been made.

The investigation of the uranium industry conducted by the Federal Grand Jury sitting in Washington, D.C. terminated in 1978 without any indictment against the Company. This action concluded with the U.S. Department of Justice filing a misdemeanor information against the Company charging anti-competitive actions under the Sherman Act. The Company, without admitting guilt, pleaded nolo contendere and was fined \$40,000.



## Note 7—Taxes

	Millions of Dollars					
	Total		United States		Foreign	
	1978	1977	1978	1977	1978	1977
Income taxes						
Current .....	\$ 925	\$1,299	\$ 36	\$ 139	\$ 889	\$1,160
Deferred .....	210	136	151	72	59	64
Total income taxes .....	<u>1,135</u>	<u>1,435</u>	<u>187</u>	<u>211</u>	<u>948</u>	<u>1,224</u>
Taxes other than income						
Consumer excise .....	1,823	1,755	807	779	1,016	976
Ad valorem .....	183	174	148	143	35	31
Sales and use .....	115	111	22	19	93	92
Import duties .....	147	115	17	16	130	99
Other .....	86	37	50	14	36	23
Total taxes other than income .....	<u>2,354</u>	<u>2,192</u>	<u>1,044</u>	<u>971</u>	<u>1,310</u>	<u>1,221</u>
Total taxes .....	<u>\$3,489</u>	<u>\$3,627</u>	<u>\$1,231</u>	<u>\$1,182</u>	<u>\$2,258</u>	<u>\$2,445</u>

Deferred taxes relating to significant timing differences have been provided as follows:

	Millions of Dollars					
	Total		United States		Foreign	
	1978	1977	1978	1977	1978	1977
Intangible drilling and development costs .....	\$ 88	\$ 62	\$ 78	\$ 57	\$ 10	\$ 5
Depreciation .....	79	64	34	15	45	49
Other .....	43	10	39	—	4	10
Total deferred income taxes .....	<u>\$210</u>	<u>\$136</u>	<u>\$151</u>	<u>\$ 72</u>	<u>\$ 59</u>	<u>\$ 64</u>

The Company's federal tax liabilities for all years prior to 1971 have been settled and paid. The Company believes that adequate provision has been made for income taxes which may become payable in settlement of open tax years.

The Company pays taxes to a number of foreign countries under various tax systems. The Internal Revenue Service and Treasury Department have undertaken a program to review foreign tax systems generally to determine which taxes offset U.S. tax otherwise due on foreign income earned by U.S. taxpayers. The Company believes that its treatment of foreign taxes for U.S. tax purposes is in accordance with the U.S. law.

No deferred taxes have been recognized for the Company's share of the undistributed earnings of certain subsidiaries and joint ventures, which were \$613 million at December 31, 1978, since these earnings are considered to be indefinitely reinvested.

Total income tax expense was \$1,135 and \$1,435 million, which equates to effective tax rates of 59 and 66 percent,

on pretax earnings for 1978 and 1977, respectively. The following schedule reconciles the difference between the U.S. statutory tax rate and the effective rate:

	1978		1977	
	Amount in Millions	% of Pretax Income	Amount in Millions	% of Pretax Income
U.S. statutory tax rate .....	\$ 924	48%	\$1,050	48%
Increase (decrease) resulting from:				
Foreign taxes at rates in excess of the U.S. tax rate .....	309	16	465	21
Investment tax credits .....	(88)	(5)	(66)	(3)
Other .....	(10)	—	(14)	—
Effective tax rate .....	<u>\$1,135</u>	<u>59%</u>	<u>\$1,435</u>	<u>66%</u>

The decrease in foreign taxes reflects a reduction in Angolan taxes caused by lower equity production under the participation agreement.



## Note 8—Exploration and Development Expenditures

	Millions of Dollars							
	Expenditures				Depreciation Etc. Charged to Income		Net Capitalized Expenditures December 31	
	Charged to Income		Capitalized					
	1978	1977	1978	1977	1978	1977	1978	1977
United States								
Oil and gas .....	\$201	\$272	\$ 637	\$ 967	\$414	\$328	\$3,368	\$3,169
Coal .....	1	—	59	43	10	8	230	185
Uranium .....	7	17	36	41	4	1	166	136
Oil shale .....	3	4	31	—	8	—	27	2
Other .....	4	5	—	1	1	—	2	3
	<u>216</u>	<u>298</u>	<u>763</u>	<u>1,052</u>	<u>437</u>	<u>337</u>	<u>3,793</u>	<u>3,495</u>
Canada								
Oil and gas .....	99	106	85	108	29	19	323	251
Tar sands .....	—	1	72	96	—	5	344	272
Coal .....	1	—	40	—	—	—	40	—
Uranium .....	6	6	4	3	5	3	24	25
	<u>106</u>	<u>113</u>	<u>201</u>	<u>207</u>	<u>34</u>	<u>27</u>	<u>731</u>	<u>548</u>
Europe—North Sea—Oil and gas .....	14	33	129	68	4	1	274	153
Other Foreign—Oil and gas .....	65	46	42	32	21	30	107	114
	<u>\$401</u>	<u>\$490</u>	<u>\$1,135</u>	<u>\$1,359</u>	<u>\$496</u>	<u>\$395</u>	<u>\$4,905</u>	<u>\$4,310</u>

Of the net capitalized expenditures, \$879 and \$1,386 million relate to recently acquired leases and undeveloped properties at December 31, 1978 and 1977, respectively.

For information concerning the Company's reserves see the unaudited Reserve Data on pages 45 through 47.

## Note 9—Properties

	Millions of Dollars							
	December 31				Year			
	Gross Investment at Cost		Net Investment		Depreciation Etc. Charged to Income		Expenditures Capitalized	
	1978	1977	1978	1977	1978	1977	1978	1977
United States								
Petroleum—Exploration and development ....	\$ 6,478	\$ 6,041	\$3,368	\$3,169	\$ 414	\$ 328	\$ 637	\$ 967
—Natural gas liquids .....	349	313	173	150	12	10	47	54
—Refining and marketing .....	2,424	2,389	1,166	1,156	94	92	148	120
Chemicals .....	1,173	1,056	856	789	56	42	123	161
Minerals .....	588	466	425	326	23	9	126	85
Corporate .....	222	212	138	143	22	12	15	67
	<u>11,234</u>	<u>10,477</u>	<u>6,126</u>	<u>5,733</u>	<u>621</u>	<u>493</u>	<u>1,096</u>	<u>1,454</u>
Canada								
Petroleum—Exploration and development ....	937	767	667	523	29	24	157	204
—Natural gas liquids .....	186	173	98	94	10	10	13	9
—Refining and marketing .....	1,130	1,053	653	609	49	43	104	154
Chemicals .....	122	103	53	40	6	6	6	2
Minerals .....	77	33	64	25	5	3	44	3
	<u>2,452</u>	<u>2,129</u>	<u>1,535</u>	<u>1,291</u>	<u>99</u>	<u>86</u>	<u>324</u>	<u>372</u>
Europe								
Petroleum—Exploration and development ....	282	158	274	153	4	1	129	68
—Refining and marketing .....	682	663	382	383	33	31	45	35
Chemicals .....	130	123	79	80	8	7	7	8
	<u>1,094</u>	<u>944</u>	<u>735</u>	<u>616</u>	<u>45</u>	<u>39</u>	<u>181</u>	<u>111</u>
Other Foreign								
Petroleum—Exploration and development ....	182	292	107	114	21	30	42	32
—Refining and marketing .....	109	102	63	56	4	4	12	5
—International marine .....	677	704	477	502	33	30	22	77
Chemicals .....	33	31	20	20	3	2	3	3
	<u>1,001</u>	<u>1,129</u>	<u>667</u>	<u>692</u>	<u>61</u>	<u>66</u>	<u>79</u>	<u>117</u>
	<u>\$15,781</u>	<u>\$14,679</u>	<u>\$9,063</u>	<u>\$8,332</u>	<u>\$ 826</u>	<u>\$ 684</u>	<u>\$1,680</u>	<u>\$2,054</u>



### Note 10—Investments in Affiliated and Associated Companies

Selected financial information on the Company's investments in affiliated and associated companies (except for the Company's investment in the nuclear partnership which was \$52 and \$14 million at December 31, 1978 and 1977, respectively) are as follows:

	Millions of Dollars			
	December 31			
	1978		1977	
	Affiliated	Associated	Affiliated	Associated
Total assets .....	\$649	\$1,330	\$631	\$1,172
Total liabilities .....	505	1,038	519	935
Net assets .....	144	292	112	237
Advances .....	28	89	18	87
	<u>\$172</u>	<u>\$ 381</u>	<u>\$130</u>	<u>\$ 324</u>
United States .....	\$ 93	\$ 43	\$ 68	\$ 30
Canada .....	—	14	—	16
Europe .....	—	178	—	135
Other Foreign .....	79	146	62	143
	<u>\$172</u>	<u>\$ 381</u>	<u>\$130</u>	<u>\$ 324</u>

The Company's equity in earnings (losses) of these companies is summarized as follows:

	Millions of Dollars			
	December 31			
	1978		1977	
	Affiliated	Associated	Affiliated	Associated
Revenues .....	\$133	\$2,446	\$111	\$2,107
Equity in earnings .....	\$ 6	\$ 60	\$ (5)	\$ 48
United States .....	\$ —	\$ 25	\$ (6)	\$ 8
Canada .....	—	—	—	3
Europe .....	—	17	—	28
Other Foreign .....	6	18	1	9
	<u>\$ 6</u>	<u>\$ 60</u>	<u>\$ (5)</u>	<u>\$ 48</u>
Cash dividends received...	\$ 13	\$ 28	\$ 10	\$ 29

The Company's affiliated domestic finance subsidiary issues commercial paper to finance the purchase of customer accounts receivable from the Company.

In 1977, the Company decided to divest its interest in its affiliated real estate subsidiaries. Significant progress was made towards this divestment in 1978 and the Company does not expect its completion to have a significant impact on future earnings.

As of December 31, 1978, the Company was contingently liable for guarantees of debt of affiliated and associated companies in the amount of \$54 million.

### Note 11—Long-Term Receivables and Other Investments

	Millions of Dollars	
	December 31	
	1978	1977
Long-term receivables .....	\$ 168	\$ 233
Other investments (at cost) .....	26	24
	<u>194</u>	<u>257</u>
Allowance for doubtful accounts .....	(40)	(57)
	<u>\$ 154</u>	<u>\$ 200</u>
United States .....	\$ 35	\$ 25
Canada .....	30	32
Europe .....	29	37
Other Foreign .....	60	106
	<u>\$ 154</u>	<u>\$ 200</u>

In 1978, a provision of \$5 million was credited to the allowance for doubtful accounts. Charges, principally write-offs, were \$22 million in 1978 and \$3 million in 1977.

### Note 12—Pension Plans

The Company has various pension plans covering substantially all of its employees. The provisions for the cost of these pension plans charged to income for the years 1978 and 1977 were \$144 and \$110 million, respectively. At December 31, 1978, unamortized prior service costs of all the various pension plans aggregated approximately \$469 million.

The Company's principal plan, the Gulf Pension Plan, covers the majority of its U.S. employees. A summary of changes in the fund investments, including receivables from the Company, for this Plan during 1978 and 1977 follows:

	Millions of Dollars	
	Year Ended December 31	
	1978	1977
Investments at January 1, at cost .....	\$863	\$800
Company contributions .....	100	86
Fund income .....	42	37
Benefits paid .....	(63)	(60)
Investments at December 31, at cost ....	<u>\$942</u>	<u>\$863</u>
Market value at December 31 .....	<u>\$955</u>	<u>\$868</u>

Based on the most recent actuarial valuation of the Gulf Pension Plan, the market value of plan assets and balance sheet accruals at December 31, 1978 exceeded the actuarially computed value of vested benefits. The actuarially computed value of vested benefits under the pension plan of Gulf Canada exceeded that plan's assets by approximately \$62 million at December 31, 1978.



### Note 13—Long-Term Debt

	Millions of Dollars	
	December 31	
	1978	1977
United States dollars		
8½% sinking fund debentures payable 1981 through 1995	\$ 200	\$ 200
6½% sinking fund debentures payable 1981 through 1993	182	191
8½ and 8.56% promissory notes payable 1981 through 1986*	170	—
8¾% notes payable 1997	125	125
3¾ to 5.65% notes payable 1979 through 1990	116	126
7 to 9% debentures payable 1979 through 1987	113	135
11¾ and 12.1% promissory notes payable 1982 and 1988*	100	—
3¾ to 5.3% bonds payable 1979 through 1997	65	74
5.35% sinking fund debentures payable 1982 through 1991	64	68
Capital lease obligations, payable through 1993	36	40
Other debentures and notes, payable through 2000	166	194
	<u>1,337</u>	<u>1,153</u>
Foreign currencies		
Canadian dollars—5¾ to 8½% payable 1979 through 1990	163	184
Italian lire—4% above Italian discount rate payable 1979 through 1985	26	29
Other currencies	32	54
	<u>1,558</u>	<u>1,420</u>
Included in current liabilities	69	113
	<u>\$1,489</u>	<u>\$1,307</u>

Approximate maturities in the years 1980 through 1983 are \$66, \$120, \$146 and \$191 million, respectively.

\*Notes bear interest at variable rates; interest rates shown are at December 31, 1978.

### Note 14—Short-Term Debt

Short-term notes payable at December 31, 1978 and 1977 were \$136 and \$151 million, respectively, and the related weighted average interest rates were 9.21 and 8.48 percent. The average aggregate short-term notes payable outstanding during 1978 and 1977 were \$189 and \$80 million, respectively, and the weighted average interest rates for all such short-term notes payable were 7.51 and 7.28 percent, respectively. The maximum aggregate amount outstanding at any month-end in 1978 was \$280 million, and in 1977 was \$167 million.

At December 31, 1978, the Company had available approximately \$461 million in unused lines of credit from banks. These lines are generally without compensating balance requirements or fees and can be withdrawn at the option of the bank after giving notice to the Company. Gulf Canada has additional lines of \$169 million for which it pays fees, at prevailing market rates, on the unused portion of the line. Borrowings under any of these lines of credit would generally bear interest at prime commercial lending rates.

### Note 15—Kewanee Acquisition

On September 19, 1977, the Company acquired all of the outstanding stock of Kewanee Industries, Inc. for an aggregate cash purchase price of \$455 million. The acquisition of Kewanee has been accounted for as a purchase transaction. Accordingly, the Company has included the results of operations of Kewanee since October 1, 1977.

### Note 16—Deferred Production Payment Proceeds

In 1975, the Company entered into two agreements (production payments) for the sale of economic interests in future production from certain oil and gas fields in the Gulf of Mexico and from the expansion of a coal mine in New Mexico. Under the terms of the agreements, the Company has dedicated percentages of production revenues for the repayment of the purchase amounts and for interest on the purchaser's financing arrangements.

Repayment of the production payments is being made solely out of the revenues derived from recovered hydrocarbons or minerals produced from the properties. Production from the oil and gas fields began in 1976 and resulted in repayments of \$32 and \$36 million in 1978 and 1977, respectively. Repayment of the production payment related to the coal properties is scheduled to begin during 1979.

### Note 17—Minority Interests

Minority interests in the equity of consolidated subsidiaries, primarily Gulf Canada, were comprised of the following:

	Millions of Dollars	
	December 31	
	1978	1977
Capital stock	\$115	\$112
Retained earnings	350	319
	<u>\$465</u>	<u>\$431</u>



## Note 18—Contingent Liabilities

On July 18, 1973, the Federal Trade Commission (FTC) issued a complaint against the Company and seven other major petroleum companies charging violation of Section 5 of the Federal Trade Commission Act and alleging a combination or agreement to monopolize crude oil refining. The complaint states no specific relief, but the FTC may ask for divestiture of certain of the Company's operations. This proceeding to date has dealt mostly with discovery matters, particularly the scope of the FTC's subpoenas. On December 15, 1978, Gulf and five of the other respondent companies filed suit against the FTC in the United States District Court for Indiana challenging the basis for the issuance of the complaint and the FTC's conduct of this proceeding. In this suit, plaintiffs assert that the refusal of the FTC to provide plaintiffs with a detailed statement of any allegedly illegal acts which the FTC claims they have committed and to provide plaintiffs prompt access to the evidence, if any, in support thereof, is in violation of rights under the Due Process Clause of the Fifth Amendment to the United States Constitution.

Seven states have brought class actions against the Company and a number of other major oil companies in federal district courts. These actions have been instituted by Florida (July 9, 1973), Connecticut (July 25, 1973), Kansas (October 8, 1974), California (June 25, 1975), Arizona (July 22, 1976), Oregon (February 10, 1977) and Washington (August 15, 1977). They allege, among other things, that the defendants combined and conspired to restrain trade in the exploration, production, transportation and sale of crude oil and in the refining, distribution and marketing of petroleum products in violation of federal and state anti-trust laws. These suits seek treble damages in unspecified amounts and injunctive relief, including divestiture of crude oil exploration and production activities. The actions have been consolidated for pre-trial proceedings in the United States District Court for the Central District of California. Proceedings involving amended pleadings, discovery and pre-trial motions are under way.

On December 4, 1974, a complaint was filed in the United States District Court for the Southern District of New York in Samuel J. Lefrak, et al. v. Arabian American Oil Company, et al. against the Company and other petroleum companies alleging a conspiracy to fix and maintain prices of crude oil and petroleum products, especially home heating oil, in violation of federal and New York antitrust laws. The allegations are similar to those in six other suits since filed in the same court: Brompton Associates Company et al. v. Arabian American Oil Company, et al.; Harry B. Helmsley, et al. v. Arabian American Oil Company, et al.; Doris Kaskel, et al. v. Arabian American Oil Company, et al.; The New York City Housing Authority

v. Arabian American Oil Company, et al.; Rochdale Village, Inc. v. Arabian American Oil Company, et al.; and Rose Associates, Inc. et al. v. Arabian American Oil Company, et al. The seven suits combined seek compensatory damages of approximately \$94 million (before trebling), punitive damages of approximately \$545 million and injunctive relief. An additional similar suit, Lifton, et al. v. Arabian American Oil Company, Civil Action No. 78-C-1137, was filed during 1978 in the United States District Court, Eastern District of New York, against the Company and other petroleum companies and seeks compensatory damages in excess of \$10,000 and punitive damages in an unspecified amount.

On March 3, 1975, a suit was filed by Nelson Bunker Hunt (subsequently joined by W. Herbert Hunt and Lamar Hunt) in the United States District Court, Southern District of New York against the Company and other oil producers. Plaintiffs allege that defendants have combined and conspired in unreasonable restraint of trade and commerce in violation of the Sherman Act and the Wilson Tariff Act and that defendants had an unlawful agreement to divide markets and to refuse crude oil to plaintiffs. Damages of \$125 million (before trebling) and at least \$90 million for breach of contract are claimed. In 1978, the District Court dismissed plaintiffs' claims based on such alleged violations and directed judgment for defendants. Plaintiffs have filed a notice of appeal to the United States Court of Appeals for the Second Circuit from the District Court's judgment. The District Court did not pass upon plaintiffs' breach of contract claims, stating that such claims are to be decided in an arbitration proceeding.

The Company believes that the items described above will not have a material adverse effect on the Company's consolidated financial position except that, with regard to the FTC complaint, the Company is unable to determine what effect, if any, this proceeding will have on future earnings of the Company.

The Company is also a party to other administrative proceedings brought by governmental authorities pursuant to federal, state or local environmental protection laws or regulations which allege violations of such laws and seek injunctive relief or civil penalties. The Company does not believe that these proceedings are, in the aggregate, material to its operations or net assets and does not foresee any material loss or interruption of its operations as a result of any alleged violation of environmental laws or regulations.

The Company was contingently liable for guarantees of loans payable by owners of service stations and others in the amount of \$129 million, and also for loans payable by affiliated and associated companies as described in Note 10.



#### **Note 19—Department of Energy (DOE)**

On July 26, 1978, the Company and the DOE entered into a proposed consent order settling all issues involved in the proposed disallowance by the DOE of approximately \$74 million in landed costs of foreign crude oils imported into the United States by the Company between October 1973 and May 1975 and landed costs of a certain crude oil through January 1976. The Company agreed to pay \$42 million and the DOE agreed to develop a program to make distribution of the \$42 million to persons who may have been overcharged and to pay any balance into the U.S. Treasury.

On August 18, 1978, a complaint titled *Joseph Stertz and Louis DeNicola v. Gulf Oil Corporation and the United States of America*, Stakeholder, was filed in the U.S. District Court for the Eastern District of New York. The suit, which was amended on or about September 25, 1978, purports to be a class action brought under Section 210 of the Economic Stabilization Act of 1970 on behalf of all purchasers of the Company's products alleging violations of petroleum pricing regulations and based on the same issues resolved between the DOE and the Company in the consent order described above. The complaint asks for damages in the amount of the proposed disallowance of \$74 million (trebled to \$222 million) and asks that the \$42-million settlement with the DOE be paid into court and allowed as a credit against such damages. In December 1978 an amended complaint was filed in the U.S. District Court, Middle District of Florida, by Zenith Industries Company purporting to represent a class of electricity purchasers against the Company, DOE and others as defendants asking that the \$42 million, subject of the consent order, be declared a constructive trust and an accounting be made to determine if plaintiffs are entitled to overcharges, treble damages and exemplary damages, all in unspecified amounts. Litigation is in the early pleading stages in these cases.

On January 5, 1979, a suit titled *The United States of America v. Gulf Oil Corporation* was filed in the U.S. District Court for the District of Columbia by the DOE. The suit challenges the Company's computation of maximum allowable prices for natural gas liquids and natural gas liquids products under the pricing regulations. The suit asks that the Company make restitution of at least \$11 million, plus interest, in the form of payments to the U.S. Treasury. The price computations questioned in this suit are also the subject of a suit filed by the Company on November 30, 1978 titled *Gulf Oil Corporation v. The Department of Energy* in the U.S. District Court for the District of Delaware.

In addition to the above issues, the Company, along with other oil and gas companies, continues to be subject to complex DOE pricing and allocation regulations and to extensive audits undertaken by the DOE. Such industry audits and DOE interpretations and application of regulations on a retroactive basis have raised numerous base period pricing and cost passthrough issues, and have led to numerous court actions filed by the various oil companies for interpretations of the regulations. The Company

continues to be subject to these audits and the possibility of additional DOE claims but believes that it has complied with these laws and regulations. The Company believes that the items described in this footnote will not have a material adverse effect on the Company's consolidated financial position.

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#### **Note 20—Gas Sales Contract**

On April 17, 1978, the United States Supreme Court denied the Company's motion for a rehearing of the Court's earlier denial of a petition for writ of certiorari to review an order of the Federal Energy Regulatory Commission (FERC) which requires the Company to pay refunds to Texas Eastern Transmission Corporation. The FERC order determined that the Company had failed to comply with its contract with Texas Eastern dated January 4, 1964 with respect to deliveries of natural gas and that the Company was obligated to pay refunds to Texas Eastern in accordance with a formula stated in the order.

The contract provides for the delivery of gas over a 26-year period or until 4.4 trillion cubic feet have been delivered, whichever first occurs, at prices of 19 cents per thousand cubic feet (mcf) for the first 10 years, 21 cents per mcf for the next 10 years and 22 cents per mcf thereafter. These prices are significantly below current area market rates. The contract further provides for delivery of a daily quantity of 500 million cubic feet (mmcf), with an option for Texas Eastern to take up to 625 mmcf per day. While average deliveries were less than 500 mmcf per day from 1972 through 1976, the Company maintained average deliveries of 592 mmcf per day during 1977 and 694 mmcf per day during 1978.

In compliance with the FERC order, the Company has filed refund calculations which, including interest, total approximately \$79 million through December 31, 1978. As daily deliveries continue to exceed 625 mmcf per day, the amount of refund subsequently to be paid will be reduced. Under the original order, the Company was granted the right to recover the amount of refunds paid after the Company had delivered an amount of gas equivalent to the contract amount less the amount of gas for which it paid refunds. Similar recoveries are also permitted as deliveries exceed 625 mmcf per day.

On January 17, 1979, FERC issued an order giving notice, directing filings and setting certain issues for hearing. The order provides that the interest accrued on or after December 15, 1976 is to be passed on to customers of Texas Eastern without obligation on their part to allow the Company to recover such interest. The amount of such interest included in the total refund calculation approximates \$12 million.

While the amount and timing of both the refunds and their subsequent recovery by the Company have not yet been established, it is anticipated that such refunds are likely to be paid during 1979. Since the Company believes it is entitled to subsequently recover the total amount refunded, the Company does not expect to incur any significant losses.



## Note 21—Stock Options

Under the Company's 1974 and 1968 Stock Option Plans, certain officers and employees of the Company and its subsidiaries have been granted stock options. No further options may be granted under the 1968 Plan.

Options granted under the plans expire from 5 to 10 years after the option date depending on the plan under which the options were granted and whether the options were qualified (as defined in the Internal Revenue Code) or nonqualified. The 1974 Plan allows the granting of non-qualified stock options with a variable price feature and stock appreciation rights. No options have been granted with the variable price feature. Options with attendant stock appreciation rights entitle the optionee to surrender unexercised options to the Company in exchange for shares of capital stock of the Company having an aggregate value equal to the excess of the fair market value of one share over the option price per share times the number of shares covered by the options surrendered. The amount of compensation expense accrued during 1978 and 1977 relating to stock appreciation rights was insignificant.

Changes in options outstanding during 1978 were as follows:

	Number of Shares
Options outstanding at January 1, 1978 .....	415,200
Options granted .....	None
Less options:	
Expired .....	73,750
Exercised .....	None
Surrendered for stock appreciation rights .....	22,750
Options outstanding at December 31, 1978 .....	<u>318,700</u>

All options outstanding at December 31, 1978 are exercisable. The average option price per share of the options outstanding at December 31, 1978 was \$21.53. Treasury shares reserved and available for granting options were 2,874,250 and 3,734,950 shares at December 31, 1978 and 1977, respectively.

## Note 22—Negotiations With Governments of Foreign Oil Producing Countries

In 1978, the Angolan government issued a decree and published the protocol which established the finalization of the participation agreement under which the Angolan government acquired a 51-percent interest in the Company's oil exploration and producing properties. The finalization of the agreement had no effect on 1978 earnings as the Company had made adequate provision for the settlement in prior years.

The Company is a member of the Iranian Consortium and has the right to lift crude oil for export under an agreement between the Iranian government and the Consortium. Due to the political unrest in Iran, the Company's liftings in that country were significantly reduced and at December 31, 1978, essentially no crude oil production was available to members for export. Prior to this curtailment of production, the Company's share of crude oil liftings had been

approximately 250,000 barrels per day. Additional purchases by the Company averaged 40,000 barrels per day prior to the curtailment.

Although the continuing unrest in Iran creates uncertainties as to the Company's ability to resume its share of crude oil liftings in that country, the Company does not expect to incur any significant loss on its investment in Iran. The unavailability of this source of crude oil could, however, have a negative impact on future earnings.

As part of the terms of the agreement, which was reached with the Ecuadorian government covering its purchase of Gulf's operations in that country effective December 31, 1976, final compensation to the Company is to be based on the net book value of assets as determined in an audit by an international accounting firm. The audit is expected to be completed in early 1979.

## Note 23—Commitments

The Company leases certain ocean tankers, service stations and other facilities including office space, tank cars and automobiles under operating lease arrangements. These leases contain various renewal options, purchase options (principally the service stations) and escalation clauses. The total rental expense of all operating leases (including spot charters) in 1978 and 1977 was \$267 and \$263 million, respectively, after being reduced by related sublease rentals of \$15 and \$14 million, respectively. Future minimum rental commitments (net of immaterial noncancelable sublease rentals) required under operating leases having initial or remaining noncancelable lease terms in excess of one year at December 31, 1978 are as follows:

	Millions of Dollars
1979 .....	\$ 87
1980 .....	70
1981 .....	46
1982 .....	30
1983 .....	22
After 1983 .....	199
	<u>\$454</u>

For information relating to commitments of the nuclear partnership see Note 5.

The Company has contractual commitments in the ordinary course of business for the acquisition or construction of properties and for the purchase of materials, supplies and services. These commitments are not considered significant in relation to the net assets of the Company.

The Company also has contractual commitments to certain companies in which it has equity interests to provide, as specified, minimum revenues from crude or product shipments or advance funds which can be applied against future transportation charges. It is anticipated that the shipments received by these companies along with other operating factors will be at levels sufficient to provide them with the revenues necessary to meet their obligations.



### Note 24—Foreign Currency Adjustments

An analysis of the net foreign currency exchange adjustments included in income follows:

	Millions of Dollars	
	Gain	(Loss)
	1978	1977
Long-term debt .....	\$ 11	\$ 16
Working capital .....	3	(16)
Exchange gain .....	14	—
Minority interest .....	(3)	1
Tax effect .....	2	2
	<u>\$ 13</u>	<u>\$ 3</u>
Canada .....	\$ 5	\$ (3)
Europe .....	—	7
Other Foreign .....	8	(1)
	<u>\$ 13</u>	<u>\$ 3</u>

Exchange gains are included in other revenues. Included in the net adjustments were unrealized gains of \$18 and \$4 million in 1978 and 1977, respectively.

### Note 25—Geographic and Segment Data

Geographic and related business segment financial data are presented on pages 43 and 44.

### Note 26—Replacement Cost Data (Unaudited)

The Securities and Exchange Commission requires the disclosure of replacement cost information of certain productive capacity and inventories and the related effect on depreciation expense and cost of sales. In general, the replacement cost of these assets and any related depreciation expense is significantly higher than the comparable historical cost amounts. The effect of replacement cost on cost of sales is not significant. Shareholders who wish to obtain this information may request a copy of the Company's Annual Report on Form 10-K in accordance with instructions on the inside cover.

### Note 27—Quarterly Financial Data (Unaudited)

Results of operations by quarter for 1978 and 1977 are presented in the Financial Review on page 25.

## Report of Independent Accountants

To the Shareholders and Board of Directors  
of Gulf Oil Corporation

We have examined the consolidated statement of financial position of Gulf Oil Corporation and its consolidated subsidiaries at December 31, 1978, and the related consolidated statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. The consolidated financial statements of Gulf Oil Corporation and its subsidiaries for the year ended December 31, 1977 were examined by other auditors whose opinion, dated February 28, 1978, on those statements was qualified as being subject to the effects, if any, on the 1977 consolidated financial statements as might have been required had the outcome of the uncertainties referred to in the following paragraph been known.

As discussed in Notes 5 and 6, the Company and a partnership in which the Company has a 50 percent interest are involved in a number of legal proceedings concerning uranium matters. Management believes that the resolution of these matters taken as a whole will not have a material adverse effect on the Company's consolidated financial position. However, the ultimate outcome of these uncertainties

cannot presently be determined, and no provision for loss has been made.

In our opinion, subject to the effects, if any, on the consolidated financial statements of the ultimate resolution of the matters referred to in the preceding paragraph, the aforementioned consolidated financial statements present fairly the financial position of Gulf Oil Corporation and its consolidated subsidiaries at December 31, 1978 and the results of their operations and the changes in their financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

*Coopers & Lybrand*

COOPERS & LYBRAND  
600 Grant Street  
Pittsburgh, Pennsylvania 15219  
February 21, 1979



# Geographic and Related Business Segment Financial Data

The Company is primarily an integrated petroleum company with secondary operations in the chemicals, minerals and nuclear industries. Petroleum revenues are derived from the production of crude oil, natural gas and natural gas liquids as well as the refining and marketing of gasolines, distillates and residual fuel oils. Petroleum revenues are also obtained from the transportation of crude and products by the Company's international tanker fleet. Chemicals revenues consist of petrochemicals, plastics and a variety of industrial and specialty chemicals. Minerals revenues are derived from the sale of coal and uranium.

## OPERATING PROFIT (LOSS)

Operating profit (loss) is total revenue of the business segment less related operating expenses. Corporate and financial items include equity earnings, interest income, interest on long-term financing and other general corporate expenses. Equity earnings are included in the geographic area of each equity company's operation. All other items are distributed to the geographic areas based on a three-factor formula of external revenues, operating expenses and identifiable assets, except that corporate and financial items related to Gulf Canada are charged directly to Canada. Income taxes are charged directly to the geographic area of the taxing authority.

	Millions of Dollars				
	1978	1977	1976*	1975*	1974*
<b>UNITED STATES</b>					
Petroleum—Exploration & production .....	\$ 559	\$ 514	\$ 516	\$ 584	\$ 611
—Refining & marketing .....	234	208	176	7	(28)
Chemicals .....	42	49	122	117	182
Minerals .....	(6)	(17)	(40)	(39)	(38)
	829	754	774	669	727
Non-operating items—Nuclear .....	(41)	(16)	(17)	(27)	(181)
—Corporate and financial items .....	(87)	(59)	(37)	(46)	(77)
—Taxes on income .....	(187)	(211)	(226)	(120)	(61)
United States net income .....	514	468	494	476	408
<b>CANADA</b>					
Petroleum—Exploration & production .....	215	208	219	190	123
—Refining & marketing .....	28	43	71	122	143
Chemicals .....	10	16	19	20	28
Minerals .....	51	27	6	(9)	(5)
	304	294	315	323	289
Non-operating items—Minority interest .....	(44)	(44)	(58)	(56)	(41)
—Corporate and financial items .....	(36)	(40)	(23)	(22)	(13)
—Taxes on income .....	(86)	(103)	(123)	(145)	(169)
Canada net income .....	138	107	111	100	66
<b>EUROPE</b>					
Petroleum—Exploration & production .....	(8)	(30)	(30)	(36)	(41)
—Refining & marketing .....	(1)	20	(26)	(112)	(74)
Chemicals .....	19	4	35	12	48
	10	(6)	(21)	(136)	(67)
Non-operating items—Corporate and financial items .....	(8)	14	18	(5)	(6)
—Taxes on income .....	(4)	(2)	(1)	(2)	(2)
Europe net income .....	(2)	6	(4)	(143)	(75)
<b>OTHER FOREIGN</b>					
Petroleum—Total (including international marine) .....	1,005	1,301	1,252	2,006	3,222
—Taxes on income .....	(858)	(1,119)	(1,042)	(1,745)	(2,518)
	147	182	210	261	704
Chemicals .....	10	6	6	(6)	9
	157	188	216	255	713
Non-operating items—Corporate and financial items .....	(16)	(17)	(1)	12	(47)
Other Foreign net income .....	141	171	215	267	666
Total net income .....	\$ 791	\$ 752	\$ 816	\$ 700	\$ 1,065

Worldwide operating profit (loss) for each business segment and total non-operating items are as follows:

Petroleum** .....	\$ 1,174	\$ 1,145	\$ 1,136	\$ 1,016	\$ 1,438
Chemicals .....	81	75	182	143	267
Minerals .....	45	10	(34)	(48)	(43)
	1,300	1,230	1,284	1,111	1,662
Non-operating items .....	(509)	(478)	(468)	(411)	(597)
Net income .....	\$ 791	\$ 752	\$ 816	\$ 700	\$ 1,065

\*Unaudited

\*\*Reduced by income taxes imposed by foreign oil producing countries in the other foreign geographic area.



## REVENUES

The transfer of products between the geographic areas and segments in which the Company operates are made at prices which represent government-regulated values, or prices which the Company believes approximate market, whichever is appropriate.

		Millions of Dollars				
		1978	1977	1976*	1975*	1974*
<b>Segments</b>						
Sales to unaffiliated customers						
Petroleum—Exploration & production		\$ 1,289	\$ 1,240	\$ 1,153	\$ 1,460	\$ 2,685
—Refining & marketing (including international marine)		16,683	16,990	15,798	13,494	14,313
Chemicals		1,701	1,208	1,051	807	902
Minerals		219	157	115	77	52
		<u>\$19,892</u>	<u>\$19,595</u>	<u>\$18,117</u>	<u>\$15,838</u>	<u>\$17,952</u>
Intersegment sales						
Petroleum—Exploration & production		\$ 7,048	\$ 7,538	\$ 7,256	\$ 6,852	\$ 7,188
—Refining & marketing (including international marine)		818	1,045	1,038	838	690
Chemicals		51	54	103	87	84
<b>Geographic</b>						
Sales to unaffiliated customers						
United States		\$ 9,647	\$ 8,828	\$ 7,856	\$ 7,130	\$ 7,100
Canada		2,577	2,546	2,297	1,900	1,659
Europe		2,630	2,257	2,057	1,843	1,840
Other Foreign		5,038	5,964	5,907	4,965	7,353
		<u>\$19,892</u>	<u>\$19,595</u>	<u>\$18,117</u>	<u>\$15,838</u>	<u>\$17,952</u>
Intergeographic sales						
United States		\$ 26	\$ 45	\$ 50	\$ 41	\$ 46
Canada		14	11	37	74	113
Europe		6	17	21	149	18
Other Foreign		3,915	3,954	3,612	3,076	3,726

## IDENTIFIABLE ASSETS

Identifiable assets are those assets used in the operations of each geographic area and business segment. Identifiable assets for equity companies represent the Company's investment in their net assets. Corporate assets principally consist of cash and marketable securities, research facilities and other assets related to the Corporate function.

		Millions of Dollars				
		December 31				
		1978	1977	1976*	1975*	1974*
<b>Segments</b>						
Petroleum—Exploration & production		\$ 5,350	\$ 4,891	\$ 3,763	\$ 3,598	\$ 3,663
—Refining & marketing (including international marine)		5,875	5,850	6,057	5,678	5,981
Chemicals		1,484	1,350	1,000	847	655
Minerals		593	424	323	279	238
		<u>13,302</u>	<u>12,515</u>	<u>11,143</u>	<u>10,402</u>	<u>10,537</u>
Investments in equity companies		605	468	312	250	313
Corporate assets		1,129	1,252	1,998	1,743	1,694
Total assets		<u>\$15,036</u>	<u>\$14,235</u>	<u>\$13,453</u>	<u>\$12,395</u>	<u>\$12,544</u>
<b>Geographic</b>						
United States		\$ 7,441	\$ 6,849	\$ 5,718	\$ 5,163	\$ 4,610
Canada		2,353	2,261	1,885	1,593	1,444
Europe		1,449	1,139	1,023	1,035	1,253
Other Foreign		2,059	2,266	2,517	2,611	3,230

\*Unaudited

For additional geographic and business segment information see Notes 9 and 10.



# Reserve Data

The reserve data presented below are unaudited and based on current estimates made by the Company. In presenting this information, the Company wishes to emphasize that estimates by their very nature are inexact and subject to constant changes and revisions, that estimates of newly discovered reserves are even more imprecise than those of producing properties and that an accurate determination of reserves at a given point in time may not be possible because of the time needed for development drilling, testing and other studies of the reserves. Accordingly, the Company believes that these estimates will change as future information becomes available.

In addition, the Company has proved reserves of oil in various countries in Africa. In recent years there have been significant changes in ownership of foreign reserves which have resulted from participation in and nationalization of producing properties by certain governments of foreign oil producing countries, and the reserves in such countries are subject to continuing changes in ownership.

## Oil and Gas

Net reserves are estimated after deduction of royalties and, therefore, represent only that production which is owned by the Company and its subsidiaries. In the United States, royalties are generally based on a fixed fractional interest and will fluctuate in direct proportion to fluctuations in reserve estimates. In Canada, government royalty rates can vary depending on prices, production volumes, the timing of initial production and changes in legislation. Due to the uncertainty of future royalty rates, the net Canadian

reserves have been calculated on the basis of the royalty rate experienced in late 1978 and 1977. Estimates of proved developed reserves include only those reserves which can be expected to be recovered through existing wells with existing equipment and operating methods. Estimates of proved undeveloped reserves include only those reserves which are expected to be recovered on undrilled acreage from new wells which are virtually certain of production when drilled, or from presently existing wells which would require relatively major expenditures to effect recompletion.

The figures presented are believed to be reasonable estimates of reserves which may be expected to be recoverable commercially at current prices and costs under existing regulatory practices and with existing conventional equipment and operating methods. They do not include reserves that may be recoverable after the expiration of leases and concessions now held by the Company and do not include quantities which may be found by new discoveries, by extensions of the areas now classified as proved in reservoirs presently known to be productive, or by improved producing techniques not yet pilot-tested or installed. While the Company anticipates that in certain fields additional wells will continue to be drilled in order to maintain or increase the rate of production or improve the recovery performance, these factors have also been excluded from the following estimates of proved reserves.

Under these circumstances, estimates of proved oil (including condensate and natural gas liquids) and gas reserves at December 31, 1978 are, and estimates at December 31, 1977 were, as follows:

	Estimated Reserves			
	Net Crude Oil (Millions of Barrels)		Net Natural Gas (Billions of Cubic Feet)	
	1978	1977	1978	1977
United States				
Proved developed .....	1,009	1,058	5,439	5,645
Proved undeveloped .....	41	37	231	353
	<u>1,050</u>	<u>1,095</u>	<u>5,670</u>	<u>5,998</u>
Canada				
Proved developed .....	252	290	1,440	1,500
Proved undeveloped .....	4	6	710	600
	<u>256</u>	<u>296</u>	<u>2,150</u>	<u>2,100</u>
Europe—North Sea				
Proved developed .....	10	—	—	—
Proved undeveloped .....	130	134	—	—
	<u>140</u>	<u>134</u>	<u>—</u>	<u>—</u>
Other Foreign				
Proved developed .....	372	201	—	—
Proved undeveloped .....	202	187	—	—
	<u>574</u>	<u>388</u>	<u>—</u>	<u>—</u>
Total proved reserves .....	<u>2,020</u>	<u>1,913</u>	<u>7,820</u>	<u>8,098</u>



Changes in reserves of net crude oil (including condensate and natural gas liquids), stated in millions of barrels, and net natural gas, stated in billions of cubic feet, during the years ended December 31, 1978 and 1977 are as follows:

	Total Proved Developed and Undeveloped									
	Total Worldwide		United States		Canada		Europe		Other Foreign	
	Net Crude Oil	Net Natural Gas	Net Crude Oil	Net Natural Gas	Net Crude Oil	Net Natural Gas	Net Crude Oil	Net Natural Gas	Net Crude Oil	Net Natural Gas
Reserves—December 31, 1976*	1,881	7,847	1,048	5,847	316	2,000	126	—	391	—
Additions from drilling	95	910	78	710	5	200	8	—	4	—
Purchases—Kewanee	58	173	58	173	—	—	—	—	—	—
Revisions of previous estimates	79	(41)	40	(51)	3	10	—	—	36	—
Production	(200)	(791)	(129)	(681)	(28)	(110)	—	—	(43)	—
Reserves—December 31, 1977	1,913	8,098	1,095	5,998	296	2,100	134	—	388	—
Additions from drilling	146	519	54	479	—	40	20	—	72	—
Revisions of previous estimates	119	—	22	(120)	(18)	120	(13)	—	128	—
Added through improved recovery	36	—	8	—	3	—	—	—	25	—
Production	(194)	(797)	(129)	(687)	(25)	(110)	(1)	—	(39)	—
Reserves—December 31, 1978	<u>2,020</u>	<u>7,820</u>	<u>1,050</u>	<u>5,670</u>	<u>256</u>	<u>2,150</u>	<u>140</u>	<u>—</u>	<u>574</u>	<u>—</u>

\*Reserves at December 31, 1976 have been restated to conform to current reserve definitions which exclude estimated non-recoverable reserves attributable to such items as fuel and gathering losses, shrinkage and flaring.

In addition to the above reserves, the Company has purchase arrangements with governments of several foreign oil producing countries which give it the right to purchase approximately 750,000 barrels per day of crude oil. At the Company's option, average daily availability can be increased or decreased within contract terms and the arrangements contain quarterly price adjustment and phase-out provisions. The Company is a member of the Iranian Consortium and under an agreement between the Iranian government and the Consortium, the Company has the right to lift certain volumes of crude oil for export. As a result of the current political atmosphere in Iran, essentially no crude oil production is currently available to members for export. Prior to this curtailment of production in the fourth quarter of 1978, the Company's share of crude oil liftings from Iran had been approximately 250,000 barrels per day.

Proved reserves of synthetic crude oil resulting from Gulf Canada's interest in the Syncrude Canada Limited project in the Athabasca tar sands are 190 million barrels at December 31, 1978, and were 191 million barrels at December 31, 1977. These reserves are stated in gross barrels as the level of royalties cannot be reasonably predicted. The Alberta government's share from the Syncrude project is 50 percent of the net profits, as defined in an agreement between the project participants and the government, with an option to convert to a 7.5-percent gross royalty. On either basis, the Alberta government has the right to take its share in kind. These reserves are being extracted by mining and processing tar sands.

#### Other Minerals

The following tables set forth estimates of the demonstrated reserves of coal and uranium controlled by the Company at December 31, 1978. These estimates are in

conformity with the classification of Mineral and Energy Resources adopted in 1974 by the United States Bureau of Mines and the United States Geological Survey. In this classification "reserve" is defined as "that portion of the identified resource from which a usable mineral and energy commodity can be economically and legally extracted at the time of determination." "Demonstrated" is a collective term for the sum of minerals in both measured (proven) and indicated (probable) resource categories. Proven reserves are those for which estimates of the quality and quantity have been computed, within a margin of error of less than 20 percent, from sample analyses and measurements from closely spaced and geologically well-known sample sites. Probable reserves are those for which estimates of the quality and quantity have been computed partly from sample analyses and measurements and partly from reasonable geological projections. The estimates set forth in the table on page 47 further meet the definition of recoverable reserves in that they are in the ground at the date of appraisal and can actually be produced in the future. An estimate of recoverable reserves is obtained by subtracting estimated future losses in mining from the mining reserves.

Estimates of developed coal and uranium reserves include only those reserves which can be produced from present operating mines, or mines under construction which will begin producing in 1979. Undeveloped reserves include those which are expected to be recovered from new mines in preliminary development or from future facilities requiring uncommitted major expenditures. The Company believes its mineral and surface rights for these undeveloped properties are adequate to assure the basic legal right to extract the minerals, but it does not warrant that it has yet obtained all permits necessary to do so.

The developed recoverable reserves of coal are those assigned to the Company's eight producing mines in Ken-



tucky, Missouri, Kansas, Colorado and New Mexico, and one new mine in Kentucky which will begin producing in 1979. Preliminary development of two additional mines, embracing approximately half of the undeveloped recoverable reserves, has advanced to the completion of detailed mine plans and mine permit applications, but state and federal permits are yet pending.

All of the Company's U.S. coal reserves are non-metallurgical coals and are suited principally to steam generation. Approximately 38 percent of the developed and undeveloped recoverable reserves are bituminous coals having a total sulfur content greater than 3.0 percent by weight. The balance are sub-bituminous coals having a total sulfur content less than 0.6 percent by weight.

The Company's owned and leased bituminous and sub-bituminous coal reserves by geographic region within the U.S. at December 31, 1978 are as follows:

	Demonstrated Reserves		
	(Millions of Tons)		
	Midwest	West	Total
Developed recoverable . . . . .	38.0	201.2	239.2
Undeveloped recoverable . . . .	132.0	186.5	318.5
Total . . . . .	170.0	387.7	557.7

The Company controls additional coal properties in the U.S. which are categorized as identified resources. These coal resources are not technically reserves but are expected to become so as a result of additional evaluation work, consolidation of leases, or changes in economic or legal conditions. As of December 31, 1978, the Company estimated that the total recoverable coal from these properties is approximately 450 million tons.

In 1978, Gulf Canada acquired an interest in the 116,000 acre Belcourt metallurgical coal property in northeastern British Columbia. Exploration and feasibility studies of this acreage are being conducted and preliminary analysis indi-

cates that the property could support production of a high quality metallurgical coal.

The Company's estimates of its uranium reserves also meet the definition of demonstrated ore reserves. These estimates, expressed as recoverable reserves, were obtained by subtracting estimated future losses in mining and milling from the in-place reserve estimates. As uranium resources typically involve substantial variations in ore grade (quality), thickness, and continuity, estimated reserves will fluctuate in proportion to changes in costs and prices. However, the uranium reserves reported are based on reasonable ore grade-thickness criteria, and represent the Company's best estimate of reserves which are expected to be recovered at current costs and prices with conventional mining methods.

All of the Company's U.S. uranium reserves are located in the Grants, New Mexico, minerals belt. The developed recoverable reserves are those remaining to be produced at the Mariano Lake mine. The undeveloped recoverable reserves are associated principally with the Mt. Taylor mine, which is currently under construction with mining scheduled to begin in 1980.

Developed recoverable reserves in Canada are comprised of the Company's 51-percent interest in the Rabbit Lake ore body, where a mine and mill have been operating since 1975. Reserves classified as undeveloped consist of other uranium deposits, wholly owned by the Company, in the vicinity of Rabbit Lake.

The Company's uranium reserves by geographic area at December 31, 1978 are as follows:

	Demonstrated Reserves		
	(Millions of Pounds)		
	United States	Canada	Total
Developed recoverable . . . . .	1.7	11.7	13.4
Undeveloped recoverable . . . .	116.9	58.0	174.9
Total . . . . .	118.6	69.7	188.3



# Five-Year Financial and Statistical Summary

## Summary of Operations

	Millions of Dollars				
	Year Ended December 31				
	1978	1977	1976	1975	1974
<b>STATEMENT OF INCOME</b>					
<b>REVENUES</b>					
Sales and other operating revenues (including consumer excise taxes) . . .	\$ 19,892	\$ 19,595	\$ 18,117	\$ 15,838	\$ 17,952
Interest income . . . . .	123	149	189	183	180
Equity in earnings (losses) . . . . .	23	25	40	(23)	16
Other revenues . . . . .	59	47	53	52	51
	<u>20,097</u>	<u>19,816</u>	<u>18,399</u>	<u>16,050</u>	<u>18,199</u>
<b>DEDUCTIONS</b>					
Purchased crude oil and products . . . . .	10,867	10,936	10,015	7,314	8,801
Operating expenses . . . . .	1,793	1,521	1,400	1,251	1,439
Selling, general and administrative expenses . . . . .	1,502	1,415	1,299	1,216	1,128
Consumer excise taxes . . . . .	1,823	1,755	1,666	1,570	1,494
Sales, use, ad valorem and other taxes . . . . .	531	437	431	644	479
Depreciation, depletion, amortization and retirements . . . . .	826	684	631	628	609
Exploration and dry hole expenses . . . . .	401	490	364	317	255
Department of Energy entitlements . . . . .	251	232	214	224	14
Interest on long-term financing . . . . .	127	110	109	114	121
Income applicable to minority interests . . . . .	50	49	62	60	44
	<u>18,171</u>	<u>17,629</u>	<u>16,191</u>	<u>13,338</u>	<u>14,384</u>
<b>INCOME BEFORE TAXES ON INCOME . . . . .</b>	<u>1,926</u>	<u>2,187</u>	<u>2,208</u>	<u>2,712</u>	<u>3,815</u>
<b>TAXES ON INCOME</b>					
United States . . . . .	187	211	226	120	61
Foreign . . . . .	948	1,224	1,166	1,892	2,689
	<u>1,135</u>	<u>1,435</u>	<u>1,392</u>	<u>2,012</u>	<u>2,750</u>
<b>NET INCOME . . . . .</b>	<u>791</u>	<u>752</u>	<u>816</u>	<u>700</u>	<u>1,065</u>
<b>RETAINED EARNINGS AT BEGINNING OF YEAR . . . . .</b>	<u>6,192</u>	<u>5,800</u>	<u>5,320</u>	<u>4,951</u>	<u>4,193</u>
<b>CASH DIVIDENDS . . . . .</b>	<u>(371)</u>	<u>(360)</u>	<u>(336)</u>	<u>(331)</u>	<u>(307)</u>
<b>RETAINED EARNINGS AT END OF YEAR . . . . .</b>	<u>\$ 6,612</u>	<u>\$ 6,192</u>	<u>\$ 5,800</u>	<u>\$ 5,320</u>	<u>\$ 4,951</u>
<b>PER-SHARE DATA</b>					
Net income . . . . .	\$ 4.06	\$ 3.86	\$ 4.19	\$ 3.60	\$ 5.47
Cash dividends . . . . .	\$ 1.90	\$ 1.85	\$ 1.73	\$ 1.70	\$ 1.58
Shareholders' equity . . . . .	\$ 39.78	\$ 37.63	\$ 35.62	\$ 33.17	\$ 31.28
Weighted average shares outstanding (in thousands) . . . . .	<u>194,997</u>	<u>194,950</u>	<u>194,804</u>	<u>194,710</u>	<u>194,658</u>

Certain amounts for 1977 have been reclassified to conform to presentation adopted in 1978.



## Management's Discussion and Analysis of the Summary of Operations

In addition to the following information, a discussion of the Company's results of operations for the fourth quarter and full year 1978 appears on pages 23 through 25 in the Financial Review and is incorporated herein by reference.

### 1978 Versus 1977

In 1978, the Company's net income increased \$39 million, or 5.2 percent, compared with 1977. This increase is primarily due to a 1.4-percent increase in revenues and a 20.9-percent decrease in taxes on income. These were partially offset by a 3.1-percent increase in deductions.

Sales and other operating revenues increased \$297 million. Refined products sales increased \$573 million, or 5.4 percent, mainly due to higher sales volumes and prices of gasoline reflecting increased demand in the United States and Europe. Chemicals sales increased \$495 million, or 41.6 percent, primarily due to the inclusion of the Kewanee chemical operations for the full year as well as increased sales of petrochemicals and plastics, due to increased capacity and the Company's entering the polystyrene business early in 1978. Partially offsetting these improvements was a 9.5-percent decrease in the combined sales of crude oil, natural gas and natural gas liquids reflecting reduced volumes and lower realizations resulting from the weak foreign market conditions that existed in the first half of 1978.

Total deductions increased \$542 million. Operating and selling, general and administrative expenses increased \$359 million, or 12.2 percent, due primarily to increased employee costs and the inclusion of Kewanee Industries for a full year. Taxes other than income taxes increased \$162 million, or 7.4 percent, primarily due to increased consumer excise taxes, which are based on higher sales volumes, and increased import duties, principally due to increased operations in Switzerland. Depreciation, depletion, amortization and retirements increased \$142 million, or 20.8 percent, reflecting the addition of Kewanee properties and amortization of the large lease acquisitions during 1977. Partially offsetting these increased costs were decreases in exploration and dry hole expenses of \$89 million, or 18.2 percent, primarily due to reduced wildcat activity in the U.S. and the North Sea.

Foreign income taxes decreased \$276 million, or 22.5 percent, primarily reflecting lower taxes in Angola due to reduced equity production under the participation agreement.

### 1977 Versus 1976

In 1977, the Company's net income decreased by \$64 million, or 7.8 percent, from 1976. This decline occurred despite a 7.7-percent increase in revenues as deductions rose by 8.9 percent and taxes on income increased 3.1 percent.

Although all major product groups contributed to the increase in sales and other operating revenues, the most significant was refined products which increased \$1,051 million, or 11.1 percent. Distillate sales increased 18.1 percent, mainly in the U.S., reflecting both the government's price decontrol during 1976 and increased sales volumes due to the strong demand during the severe winter weather in early 1977. Gasoline price increases in the U.S. also contributed to increased revenues, reflecting the Company's ability to pass through higher production costs to its customers. Sales of natural gas and natural gas liquids increased \$245 million, or 23.7 percent, reflecting improved prices for natural gas in the U.S. and Canada, and also reflecting increased volume sales of natural gas liquids due to the growing market of the Company's Warren Petroleum division. Chemicals sales increased \$177 million, or 17.5 percent, primarily due to the inclusion of the Kewanee chemical operations for the fourth quarter of 1977 and increased sales of petrochemicals and plastics. Other operating revenues increased \$164 million, or 15.8 percent, principally due to increased commodities sales. Interest income decreased by \$40 million, or 21.2 percent, due to a reduction in 1977 in the Company's investment portfolio as a result of record capital expenditures, and as a result of nonrecurring interest income received in 1976 in connection with the participation settlement with the government of Nigeria.

Total deductions increased \$1,438 million in 1977, primarily as a result of a 9.2-percent increase in purchased crude oil and products. This increase occurred largely as a result of two OPEC price increases during the year, even though the volume of crude oil purchased decreased. The Department of Energy's reclassification of domestic oil properties and the decontrol of stripper prices in 1976 also increased purchased crude costs in the United States. Exploration and dry hole expenses increased 34.6 percent as the Company stepped up its wildcat well drilling, especially offshore Louisiana, California and Alaska, and in the Beaufort Sea of Canada.

Foreign taxes on income increased \$58 million, or five percent, primarily reflecting increased taxes in Angola due to a higher level of operation in 1977.



# Five-Year Financial and Statistical Summary (Continued)

	1978	1977	1976	1975	1974
(Dollar Amounts in Millions)					
Financial position at year-end					
Current assets .....	\$ 5,162	\$ 5,187	\$ 6,179	\$ 5,473	\$ 5,774
Current liabilities .....	4,240	4,242	4,195	3,708	4,105
Working capital .....	922	945	1,984	1,765	1,669
Properties .....	9,063	8,332	6,632	6,236	6,035
Investments and other assets .....	811	716	642	686	735
Employed capital .....	10,796	9,993	9,258	8,687	8,439
Long-term debt .....	1,489	1,307	1,168	1,294	1,471
Minority interests .....	465	431	397	353	314
Other long-term liabilities .....	1,085	918	751	582	565
Net assets (shareholders' equity) .....	\$ 7,757	\$ 7,337	\$ 6,942	\$ 6,458	\$ 6,089
Total assets .....	\$15,036	\$14,235	\$13,453	\$12,395	\$12,544
Changes in financial position					
Funds provided by:					
Net income .....	\$ 791	\$ 752	\$ 816	\$ 700	\$ 1,065
Noncash income items .....	1,056	833	746	839	732
Funds from operations .....	1,847	1,585	1,562	1,539	1,797
New financing .....	321	233	156	156	75
Other—net .....	209	282	525	264	280
	2,377	2,100	2,243	1,959	2,152
Funds used for:					
Properties and business investments .....	1,728	2,523	1,378	1,229	1,406
Reduction of long-term debt and production payments .....	166	171	211	225	243
Dividends .....	371	360	336	331	307
Other—net .....	135	85	99	78	41
	2,400	3,139	2,024	1,863	1,997
Increase (decrease) in working capital .....	\$ (23)	\$(1,039)	\$ 219	\$ 96	\$ 155
Capital and exploration expenditures					
Plant expenditures .....	\$ 1,680	\$ 2,054	\$ 1,362	\$ 1,131	\$ 1,399
Business investments, including Kewanee .....	48	469	16	98	7
Exploration expense .....	188	222	160	133	125
Dry hole expense .....	213	268	204	184	130
	\$ 2,129	\$ 3,013	\$ 1,742	\$ 1,546	\$ 1,661
Product realizations					
Natural gas (dollars per MCF)					
United States .....	\$ .61	\$ .56	\$ .45	\$ .35	\$ .26
Canada .....	1.37	1.24	1.05	.68	.30
Refined products (dollars per barrel)					
United States .....	17.71	16.95	15.27	14.16	12.49
Canada .....	16.01	14.76	14.13	11.95	10.78
Europe .....	19.83	18.19	16.80	15.77	14.13
Other Foreign .....	15.10	14.89	13.81	11.47	11.10
Wages, salaries and employee benefits .....	\$ 1,345	\$ 1,134	\$ 1,113	\$ 963	\$ 810
Employees at year-end .....	58,300	59,400	53,300	52,100	52,700
Shareholders at year-end					
Individuals .....	302,339	300,099	308,776	325,919	323,224
Institutional .....	52,737	52,454	47,992	49,269	49,191
Total .....	355,076	352,553	356,768	375,188	372,415
Shares outstanding (in thousands)					
Individuals .....	66,880	67,024	68,920	73,310	73,431
Institutional .....	128,116	127,944	125,944	121,400	121,245
Total .....	194,996	194,968	194,864	194,710	194,676

Certain amounts for prior years have been reclassified to conform to presentation adopted in 1978.

The results of operations of Kewanee are included above from October 1, 1977. Total operating data in the five-year statistical summary includes 100 percent of volumes of all consolidated subsidiaries (more than 50-percent owned) and equity interest in companies owned 50-percent or less. The volumetric data included in this five-year financial and statistical summary also includes amounts related to Kewanee from October 1, 1977, except that chemical volumes exclude Kewanee amounts because of the differences existing in the chemical mix and because there is no readily available conversion measurement.



	1978	1977	1976	1975	1974
<b>Net crude oil and natural gas liquids produced</b> <b>(daily average barrels)</b>					
United States					
Net crude oil produced					
California—onshore .....	7,800	7,700	8,600	7,900	6,100
—offshore .....	4,200	4,300	5,000	5,600	6,200
	12,000	12,000	13,600	13,500	12,300
Louisiana—onshore .....	57,300	58,900	61,500	68,200	80,700
—offshore .....	55,700	61,300	57,000	50,400	53,300
	113,000	120,200	118,500	118,600	134,000
Texas .....	138,600	141,600	144,100	161,700	183,800
Mississippi .....	17,400	17,700	18,300	20,100	21,700
New Mexico .....	12,000	11,200	11,400	11,400	11,300
Other .....	38,100	33,600	31,800	35,300	37,800
	331,100	336,300	337,700	360,600	400,900
Net natural gas liquids produced .....	69,000	65,900	60,800	64,900	75,400
Total United States .....	400,100	402,200	398,500	425,500	476,300
Canada					
Net crude oil produced .....	65,100	66,200	71,000	79,900	89,200
Net natural gas liquids produced .....	9,600	10,100	9,800	10,900	10,000
Total Canada .....	74,700	76,300	80,800	90,800	99,200
Europe—Net crude oil produced .....	4,500	2,200	2,200	2,900	3,000
Other Foreign					
Net crude oil produced					
Kuwait					
Equity .....	—	—	—	120,800	531,100
Participation purchases .....	—	—	—	86,100	521,000
Long-term purchases .....	493,700	439,000	520,900	454,300	—
	493,700	439,000	520,900	661,200	1,052,100
Iran—Long-term purchases .....	222,000	305,400	310,600	331,700	293,000
Nigeria					
Equity .....	147,400	130,800	131,800	102,200	297,700
Participation purchases .....	86,300	99,700	97,500	79,600	71,400
	233,700	230,500	229,300	181,800	369,100
Angola					
Equity .....	45,600	122,700	77,700	133,800	150,700
Participation purchases .....	32,000	—	—	—	—
	77,600	122,700	77,700	133,800	150,700
Venezuela					
Equity .....	—	—	—	146,700	161,400
Long-term purchases .....	72,800	95,500	98,000	—	—
	72,800	95,500	98,000	146,700	161,400
Zaire—Equity .....	9,500	10,800	12,300	—	—
Gabon—Equity .....	2,200	2,600	3,200	4,000	—
Indonesia—Equity .....	100	—	—	—	—
Ecuador—Equity .....	—	—	67,400	49,500	65,300
	1,111,600	1,206,500	1,319,400	1,508,700	2,091,600
Net natural gas liquids produced .....	—	—	—	12,200	30,000
Total Other Foreign .....	1,111,600	1,206,500	1,319,400	1,520,900	2,121,600
Total .....	1,590,900	1,687,200	1,800,900	2,040,100	2,700,100

<b>Gross crude oil and natural gas liquids produced,</b> <b>including participation and long-term purchase</b> <b>arrangements (daily average barrels)</b>					
United States .....	462,300	498,200	461,600	491,400	551,900
Canada .....	111,900	115,100	118,300	130,600	139,200
Europe .....	70,600	2,200	2,200	2,900	4,300
Other Foreign .....	1,204,300	1,283,500	1,513,100	1,607,800	2,169,300
Total .....	1,849,100	1,899,000	2,095,200	2,232,700	2,864,700



# Five-Year Financial and Statistical Summary (Continued)

	1978		1977		1976		1975		1974	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
<b>Oil and gas acreage at December 31</b>										
<b>(thousands of acres)</b>										
United States										
Producing .....	4,694	1,876	4,999	1,972	4,465	1,734	4,091	1,679	3,765	1,607
Nonproducing .....	22,998	12,785	23,211	13,440	18,726	10,777	17,997	10,178	17,218	9,730
	27,692	14,661	28,210	15,412	23,191	12,511	22,088	11,857	20,983	11,337
Canada										
Producing .....	2,065	1,138	1,948	1,093	1,831	1,003	1,622	874	1,614	903
Nonproducing .....	101,653	25,535	110,364	23,620	86,902	24,169	91,233	25,203	80,772	23,728
	103,718	26,673	112,312	24,713	88,733	25,172	92,855	26,077	82,386	24,631
Europe										
Producing .....	2	1	—	—	—	—	—	—	—	—
Nonproducing .....	2,454	677	3,765	1,020	2,031	760	2,141	821	2,533	958
	2,456	678	3,765	1,020	2,031	760	2,141	821	2,533	958
Other Foreign										
Producing .....	2,595	1,205	2,595	1,868	5,181	3,037	7,758	3,957	9,406	4,439
Nonproducing .....	10,118	4,243	11,546	5,532	12,205	5,012	27,190	20,676	30,942	24,222
	12,713	5,448	14,141	7,400	17,386	8,049	34,948	24,633	40,348	28,661
Total .....	146,579	47,460	158,428	48,545	131,341	46,492	152,032	63,388	146,250	65,587
<b>Wells capable of producing at December 31</b>										
United States										
Oil .....	38,854	14,477	37,577	14,333	33,196	12,037	32,476	11,726	33,661	13,519
Gas .....	4,186	2,251	4,078	2,159	3,502	1,719	3,397	1,655	3,975	1,754
	43,040	16,728	41,655	16,492	36,698	13,756	35,873	13,381	37,636	15,273
Canada										
Oil .....	5,493	1,221	5,507	1,210	5,487	1,207	5,471	1,175	5,451	1,184
Gas .....	1,095	325	1,039	289	920	230	867	225	839	216
	6,588	1,546	6,546	1,499	6,407	1,437	6,338	1,400	6,290	1,400
Europe										
Oil .....	95	15	80	14	70	11	70	11	74	13
Gas .....	1	—	1	—	1	—	1	—	1	—
	96	15	81	14	71	11	71	11	75	13
Other Foreign										
Oil .....	388	177	369	234	352	223	5,219	2,097	5,829	2,352
Gas .....	4	3	—	—	2	1	21	8	22	8
	392	180	369	234	354	224	5,240	2,105	5,851	2,360
Total .....	50,116	18,469	48,651	18,239	43,530	15,428	47,522	16,897	49,852	19,046
<b>Wells drilled during the year</b>										
United States										
Exploratory wells —Oil .....	16	9	20	15	17	11	9	7	5	4
—Gas .....	32	17	27	20	18	14	8	3	16	7
—Dry .....	99	53	127	94	79	56	59	33	56	35
Development wells —Oil .....	871	363	961	580	1,153	463	910	459	874	446
—Gas .....	220	137	211	142	151	85	121	59	84	34
—Dry .....	88	52	111	75	59	42	57	34	54	33
	1,326	631	1,457	926	1,477	671	1,164	595	1,089	559
Canada										
Exploratory wells —Oil .....	4	2	1	1	3	2	—	—	—	—
—Gas .....	14	7	19	12	17	10	8	5	7	4
—Dry .....	41	21	31	20	20	8	22	10	20	10
Development wells —Oil .....	40	17	38	23	14	10	16	8	30	12
—Gas .....	55	25	67	40	53	19	33	13	20	6
—Dry .....	21	17	18	13	17	10	15	9	7	5
	175	89	174	109	124	59	94	45	84	37
Europe										
Exploratory wells —Oil .....	3	—	7	1	4	1	2	1	4	1
—Gas .....	—	—	1	—	1	—	1	—	—	—
—Dry .....	5	3	13	4	9	3	2	—	12	4
Development wells —Oil .....	23	2	—	—	—	—	3	1	6	2
—Gas .....	—	—	—	—	—	—	—	—	—	—
—Dry .....	2	—	1	—	—	—	2	1	1	—
	33	5	22	5	14	4	10	3	23	7
Other Foreign										
Exploratory wells —Oil .....	15	6	7	3	16	7	17	9	28	10
—Gas .....	2	1	—	—	2	1	—	—	—	—
—Dry .....	15	5	12	5	16	7	38	20	20	12
Development wells —Oil .....	6	4	10	4	16	7	104	39	193	81
—Gas .....	—	—	—	—	—	—	1	—	—	—
—Dry .....	1	—	—	—	1	1	10	2	28	11
	39	16	29	12	51	23	170	70	269	114
Total .....	1,573	741	1,682	1,052	1,666	757	1,438	713	1,465	717

Gross wells represent the total number of wells in which all or part of the working interest is owned by the Company.

Net wells represent only that part of the working interest applicable to the Company, that is, the sum of all fractional interests.



	1978	1977	1976	1975	1974
<b>Natural gas liquids sold (daily average barrels)</b>					
United States .....	125,700	123,200	100,900	90,000	86,700
Canada .....	27,000	28,800	29,700	27,100	24,900
Europe .....	9,800	9,000	8,000	8,300	8,100
Other Foreign .....	10,900	12,200	8,200	17,100	33,200
Total .....	173,400	173,200	146,800	142,500	152,900
<b>Net natural gas produced (thousand cubic feet per day)</b>					
United States					
Texas .....	703,200	807,500	794,100	974,600	1,118,900
Louisiana—offshore .....	705,000	579,900	399,600	429,500	436,600
—onshore .....	162,400	163,800	198,100	245,400	302,900
New Mexico .....	164,400	171,500	168,100	154,400	156,100
Oklahoma .....	69,100	68,400	69,100	71,300	69,200
Other .....	78,200	73,800	83,500	83,200	99,200
	1,882,300	1,864,900	1,712,500	1,958,400	2,182,900
Canada .....	270,500	301,800	322,600	369,300	405,500
Other Foreign .....	—	—	—	105,700	440,000
Total .....	2,152,800	2,166,700	2,035,100	2,433,400	3,028,400
<b>Natural gas sold (thousand cubic feet per day)</b>					
United States					
Regulated					
Texas Eastern .....	693,600	592,400	361,900	357,500	391,200
Other .....	820,400	893,000	991,900	1,172,900	1,211,800
	1,514,000	1,485,400	1,353,800	1,530,400	1,603,000
Non-Regulated .....	474,500	553,100	510,600	540,300	701,700
	1,988,500	2,038,500	1,864,400	2,070,700	2,304,700
Canada .....	385,500	431,100	455,000	481,100	492,200
Other Foreign .....	—	—	—	130,300	166,500
Total .....	2,374,000	2,469,600	2,319,400	2,682,100	2,963,400
<b>Chemicals sold (millions of pounds)</b>					
United States					
Petrochemicals .....	5,430	5,100	4,560	3,750	4,350
Plastics .....	860	660	500	400	600
Industrial and Specialty .....	750	730	650	710	920
	7,040	6,490	5,710	4,860	5,870
Canada					
Petrochemicals .....	2,360	2,370	2,200	1,870	2,120
Industrial and Specialty .....	10	10	10	10	—
	2,370	2,380	2,210	1,880	2,120
Europe					
Petrochemicals .....	1,530	1,010	1,230	790	1,690
Other Foreign					
Petrochemicals .....	720	680	540	490	410
Plastics .....	300	260	240	200	170
Industrial and Specialty .....	—	—	—	—	100
	1,020	940	780	690	680
Total .....	11,960	10,820	9,930	8,220	10,360
<b>Coal mined (thousands of tons)</b>					
United States					
Surface .....	8,000	7,100	6,500	5,700	6,000
Underground .....	1,000	1,400	1,400	1,600	1,500
Total .....	9,000	8,500	7,900	7,300	7,500
<b>Uranium produced (thousands of pounds)</b>					
United States .....	470	60	—	—	—
Canada .....	2,810	2,570	1,900	370	—
Total .....	3,280	2,630	1,900	370	—



# Five-Year Financial and Statistical Summary (Continued)

	Refining Capacity 12/31/78	1978	1977	1976	1975	1974
<b>Crude oil processed (daily average barrels)*</b>						
<b>United States</b>						
Port Arthur, Texas .....	334,500	309,800	290,600	304,500	289,200	299,500
Philadelphia, Pennsylvania .....	207,600	206,900	203,100	153,500	156,600	176,700
Alliance, Louisiana .....	202,000	178,500	197,300	200,700	134,200	154,200
Toledo, Ohio .....	50,300	47,100	44,100	42,800	46,800	49,900
Santa Fe Springs, California .....	51,500	43,100	46,200	49,200	45,700	47,100
Cincinnati, Ohio .....	42,700	41,800	39,700	43,600	38,000	40,700
Venice, Louisiana .....	28,700	17,600	19,300	18,400	19,200	20,200
Hercules, California .....	—	—	—	1,900	19,900	19,700
Processed by others for Gulf .....	—	—	—	—	—	5,000
	<u>917,300</u>	<u>844,800</u>	<u>840,300</u>	<u>814,600</u>	<u>749,600</u>	<u>813,000</u>
<b>Canada</b>						
Alberta .....	88,700	80,500	83,500	72,400	77,900	77,600
Quebec .....	77,300	64,800	72,100	63,900	62,300	69,100
Ontario .....	79,100	63,100	69,700	60,900	58,600	62,700
Nova Scotia .....	81,000	47,200	66,100	46,000	53,000	71,300
British Columbia .....	46,000	41,900	41,100	44,600	43,900	44,200
Saskatchewan .....	13,300	3,900	6,300	6,300	5,400	3,700
Processed by others for Gulf .....	—	—	100	1,300	2,300	1,900
	<u>385,400</u>	<u>301,400</u>	<u>338,900</u>	<u>295,400</u>	<u>303,400</u>	<u>330,500</u>
<b>Europe</b>						
Wales .....	103,000	72,300	52,400	49,500	45,800	66,100
Netherlands .....	94,000	72,700	66,200	64,600	49,700	72,300
Denmark .....	85,000	62,800	67,600	74,100	70,000	88,100
Italy .....	82,500	59,800	57,900	64,100	59,100	68,300
<b>Equity interest</b>						
France (18%) .....	77,200	60,200	57,500	50,800	54,000	65,000
Spain (34%) .....	82,300	44,000	41,900	47,300	48,300	49,100
Switzerland (25%) .....	16,500	15,500	15,500	14,600	13,700	15,200
Processed by others for Gulf .....	—	17,200	10,900	20,700	35,100	38,700
	<u>540,500</u>	<u>404,500</u>	<u>369,900</u>	<u>385,700</u>	<u>375,700</u>	<u>462,800</u>
<b>Other Foreign</b>						
Ecuador .....	8,000	6,100	7,200	7,300	7,200	7,000
Kuwait .....	—	—	—	—	3,600	59,100
Puerto Rico .....	37,800	33,000	33,400	34,600	35,200	34,200
Taiwan .....	12,700	11,600	12,400	11,300	12,100	9,600
Venezuela .....	—	—	—	—	75,500	96,000
<b>Equity interest</b>						
Korea (50%) .....	132,500	128,400	111,800	100,600	89,600	82,800
Okinawa (45%) .....	40,200	33,000	32,800	32,000	28,600	35,200
Processed by others for Gulf .....	—	3,000	18,800	15,100	20,400	20,800
	<u>231,200</u>	<u>215,100</u>	<u>216,400</u>	<u>200,900</u>	<u>272,200</u>	<u>344,700</u>
<b>Total</b> .....	<b>2,074,400</b>	<b>1,765,800</b>	<b>1,765,500</b>	<b>1,696,600</b>	<b>1,700,900</b>	<b>1,951,000</b>

## Percent of refining capacity utilized

United States .....	92	93	92	87	93
Canada .....	78	90	79	80	100
Europe .....	72	69	76	70	86
Other Foreign .....	92	89	89	75	69

\*Includes crude oil processed by the Company for its own account and for others, and by others for the Company's account.



	1978	1977	1976	1975	1974
<b>Refined products sold (daily average barrels)</b>					
United States					
Gasoline .....	483,900	469,000	479,600	467,900	476,300
Distillate .....	210,000	228,400	213,500	208,700	232,300
Residual .....	55,200	53,900	61,500	64,000	69,200
Kerosene .....	45,500	42,800	41,000	39,800	47,000
Lubricating oils .....	12,600	12,800	10,900	10,000	13,000
Other manufactured oils .....	20,800	15,000	22,100	15,300	22,800
	<u>828,000</u>	<u>821,900</u>	<u>828,600</u>	<u>805,700</u>	<u>860,600</u>
Canada					
Gasoline .....	115,200	114,400	106,500	105,800	108,500
Distillate .....	86,600	90,700	82,100	81,900	85,400
Residual .....	40,400	48,700	38,900	42,100	41,900
Kerosene .....	3,100	3,000	2,800	1,600	600
Lubricating oils .....	2,700	2,500	2,100	1,900	2,000
Other manufactured oils .....	23,600	27,100	25,600	30,200	29,900
	<u>271,600</u>	<u>286,400</u>	<u>258,000</u>	<u>263,500</u>	<u>268,300</u>
Europe					
Gasoline .....	66,900	63,200	59,300	60,100	52,700
Distillate .....	139,900	133,000	128,600	134,800	113,300
Residual .....	86,700	87,100	89,600	85,900	96,500
Kerosene .....	21,000	18,200	15,300	13,000	10,700
Lubricating oils .....	6,400	6,300	6,000	3,900	7,200
Other manufactured oils .....	17,300	17,500	20,100	22,400	17,000
	<u>338,200</u>	<u>325,300</u>	<u>318,900</u>	<u>320,100</u>	<u>297,400</u>
Other Foreign					
Gasoline .....	20,700	23,100	21,700	29,700	29,800
Distillate .....	39,900	38,500	30,900	33,200	37,700
Residual .....	134,000	122,200	110,400	128,500	142,600
Kerosene .....	15,700	12,600	13,700	11,000	10,400
Lubricating oils .....	3,900	3,200	2,600	2,600	2,400
Other manufactured oils .....	31,200	35,900	24,500	15,900	23,600
	<u>245,400</u>	<u>235,500</u>	<u>203,800</u>	<u>220,900</u>	<u>246,500</u>
Total .....	<u>1,683,200</u>	<u>1,669,100</u>	<u>1,609,300</u>	<u>1,610,200</u>	<u>1,672,800</u>
<b>United States imports (daily average barrels)</b>					
Crude oil from					
Nigeria .....	189,900	234,400	203,400	118,800	160,900
United Arab Emirates .....	56,100	38,900	17,900	—	—
Libya .....	55,700	45,200	43,700	13,800	—
Indonesia .....	20,200	900	300	7,700	11,800
Algeria .....	19,500	17,900	8,400	5,400	1,400
Other .....	33,100	35,000	52,400	103,000	90,800
Total .....	<u>374,500</u>	<u>372,300</u>	<u>326,100</u>	<u>248,700</u>	<u>264,900</u>
Refined products .....	<u>24,300</u>	<u>25,800</u>	<u>18,500</u>	<u>18,700</u>	<u>68,200</u>
<b>Marketing retail outlets*</b>					
United States					
Dealer operated .....	16,902	17,135	17,533	18,182	19,484
Company operated .....	971	1,142	1,323	1,018	443
	<u>17,873</u>	<u>18,277</u>	<u>18,856</u>	<u>19,200</u>	<u>19,927</u>
Canada .....	3,178	3,759	3,884	4,373	4,814
Europe .....	3,998	4,019	4,055	4,081	4,234
Other Foreign .....	302	296	283	369	376
Total .....	<u>25,351</u>	<u>26,351</u>	<u>27,078</u>	<u>28,023</u>	<u>29,351</u>
<b>Tankers Owned, Leased and Long-Term Chartered</b>					
Deadweight Tons					
Up to 50,000 .....	27	29	33	39	46
50,001 to 130,000 .....	22	27	25	21	25
130,000 to 250,000 .....	4	4	4	3	4
Over 250,000 .....	16	16	14	15	13
	<u>69</u>	<u>76</u>	<u>76</u>	<u>78</u>	<u>88</u>
Thousands of Deadweight Tons					
Owned and Leased .....	5,593	5,755	4,783	4,655	4,341
Long-Term Chartered .....	2,815	3,067	3,385	3,487	3,842
	<u>8,408</u>	<u>8,822</u>	<u>8,168</u>	<u>8,142</u>	<u>8,183</u>

\*Excludes equity interest retail outlets.



## DIRECTORS AND OFFICERS



Seated, left to right: Charles M. Beeghly, Sister Jane Scully, Jerry McAfee, James E. Lee and Nathan W. Pearson; standing, left to right: J. Peter Gordon, Robert Dickey III, James M. Walton, James H. Higgins, Edward B. Walker, III, R. Hal Dean, Edwin Singer and Z. D. Bonner.

### BOARD OF DIRECTORS

Jerry McAfee(1)(4)  
*Chairman of the Board and  
Chief Executive Officer  
Gulf Oil Corporation*

James E. Lee(1)(4)  
*President  
Gulf Oil Corporation*

Charles M. Beeghly(3)(5)  
*Retired Chairman of the  
Board and Chief  
Executive Officer  
Jones & Laughlin Steel  
Corporation*

Z. D. Bonner  
*Chairman  
Gulf Oil Chemicals  
Company*

R. Hal Dean(5)  
*Chairman of the Board and  
Chief Executive Officer  
Ralston Purina Company*

Robert Dickey III(3)  
*Chairman and President  
Dravo Corporation*

J. Peter Gordon  
*Chairman and Chief  
Executive Officer  
The Steel Company  
of Canada, Limited*

James H. Higgins(1)(3)  
*Chairman of the Board and  
Chief Executive Officer  
Mellon Bank, N.A. and  
Mellon National  
Corporation*

Nathan W. Pearson  
(1)(2)(5)  
*Financial Advisor  
Paul Mellon Family  
Interests*

Sister Jane Scully(2)(5)  
*President  
Carlow College*

Edwin Singer(1)  
*Partner  
Whitcom Investment  
Company*

Edward B. Walker, III  
*Executive Vice President  
Gulf Oil Corporation*

James M. Walton(2)(3)  
*President  
Carnegie Institute and  
Carnegie Library of  
Pittsburgh*

- (1) Member of Executive Committee; Mr. McAfee, Chairman
- (2) Member of Business Principles Committee; Mr. Walton, Chairman
- (3) Member of Audit Committee; Mr. Higgins, Chairman
- (4) Member of Directors' Fee Committee; Mr. McAfee, Chairman
- (5) Member of Human Resources Committee; Mr. Beeghly, Chairman



**PRINCIPAL  
CORPORATE  
OFFICERS**

Jerry McAfee  
*Chairman of the Board and  
Chief Executive Officer*  
James E. Lee  
*President*  
Harold H. Hammer  
*Executive Vice President*  
Edward B. Walker, III  
*Executive Vice President*

Gerald W. Bush  
*Senior Vice President*  
Pierre E. Holloway  
*Senior Vice President*  
Merle E. Minks  
*General Counsel*  
Charles A. Boyce  
*Secretary and Associate  
General Counsel*

James L. Murdy  
*Vice President  
and Comptroller*  
Paul H. Weyrauch  
*Treasurer*  
Robert T. Brown  
*Vice President  
Planning*  
William E. Moffett  
*Vice President  
Public Affairs*

**OTHER  
CORPORATE  
OFFICERS**

George M. Binegar  
*Vice President  
Human Resources*  
L. Hill Bonin, Jr.  
*Vice President  
Executive Director  
Washington Office*

Merlin P. Breaux  
*Vice President  
Industrial Relations*  
Nicholas J. Covatta, Jr.  
*Vice President  
Strategy Development*

O. J. McGill  
*Vice President  
General Auditor*  
Jack H. Morris  
*Vice President  
Financial Relations*

**PRINCIPAL DIVISIONS AND  
SUBSIDIARY COMPANIES****GULF OIL EXPLORATION AND  
PRODUCTION COMPANY**  
HOUSTON, TEXAS

M. J. Hill  
*President and Chief Executive*

L. A. Ramsey  
*Executive Vice President and  
Chief Operating Officer*

J. O. Carter  
*Senior Vice President, U.S. Operations*

J. A. Strand  
*Senior Vice President  
International Operations*

C. C. McKee  
*President, Warren Petroleum Company*  
TULSA, OKLAHOMA

**GULF MINERAL RESOURCES  
COMPANY**  
DENVER, COLORADO

R. J. Goeken  
*President*

S. A. Zagnoli  
*Executive Vice President*

R. M. Holsten  
*President, The Pittsburg &  
Midway Coal Mining Co.*

**GULF REFINING AND  
MARKETING COMPANY**  
HOUSTON, TEXAS

R. W. Baldwin  
*President and Chief Executive*

B. W. Miller  
*Senior Vice President*

E. F. Eisemann, Jr.  
*Executive Vice President  
Gulf Oil Company—U.S.*

T. G. Harper  
*Executive Vice President  
Gulf Oil Company—U.S.*

A. G. Smith  
*Executive Vice President  
Gulf Oil Company—U.S.*

D. R. Hoyer  
*President  
Gulf Oil Company—International*  
LONDON, ENGLAND

**GULF OIL CHEMICALS  
COMPANY**  
HOUSTON, TEXAS

Z. D. Bonner  
*Chairman and Chief Executive*

W. C. Roher  
*President*

**GULF CANADA LIMITED**  
TORONTO, CANADA

C. D. Shepard  
*Chairman and Chief Executive*

J. L. Stoik  
*President*

**GULF TRADING AND  
TRANSPORTATION COMPANY**  
PITTSBURGH, PENNSYLVANIA

Herbert I. Goodman  
*President and Chief Executive*

S. L. Sugarman  
*Executive Vice President*

**GULF SCIENCE AND  
TECHNOLOGY COMPANY**  
PITTSBURGH, PENNSYLVANIA

Z. Q. Johnson  
*President and Chief Executive*

H. A. LaRue  
*Executive Vice President*

**GULF OIL REAL ESTATE  
DEVELOPMENT COMPANY**  
RESTON, VIRGINIA

William P. Moyles  
*President and Chief Executive*

**CORPORATE OFFICES**

Gulf Oil Corporation  
P.O. Box 1166  
Pittsburgh, Pennsylvania 15230  
Telephone: (412) 263-5000

**TRANSFER AGENTS**

Bradford Trust Company, New York  
The First National Bank of Chicago  
Mellon Bank, N.A., Pittsburgh  
Canada Permanent Trust Company, Toronto

**REGISTRARS**

Bradford Trust Company, New York  
The First National Bank of Chicago  
Pittsburgh National Bank  
Montreal Trust Company, Toronto





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